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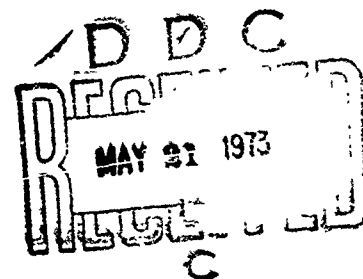
ame

MC REPORT 011
Volume 7

**ACOUSTIC ENVIRONMENTAL SCENARIOS
AND
PREDICTIONS FOR ASW**

**VOLUME 7
AREA 3A, SUMMER
PREDICTIONS FOR PASSIVE SONAR**

October 1972



LONG RANGE ACOUSTIC PROPAGATION PROJECT



**OCEAN SCIENCE PROGRAM
MAURY CENTER FOR OCEAN SCIENCE
Department of the Navy
Washington, D.C.**

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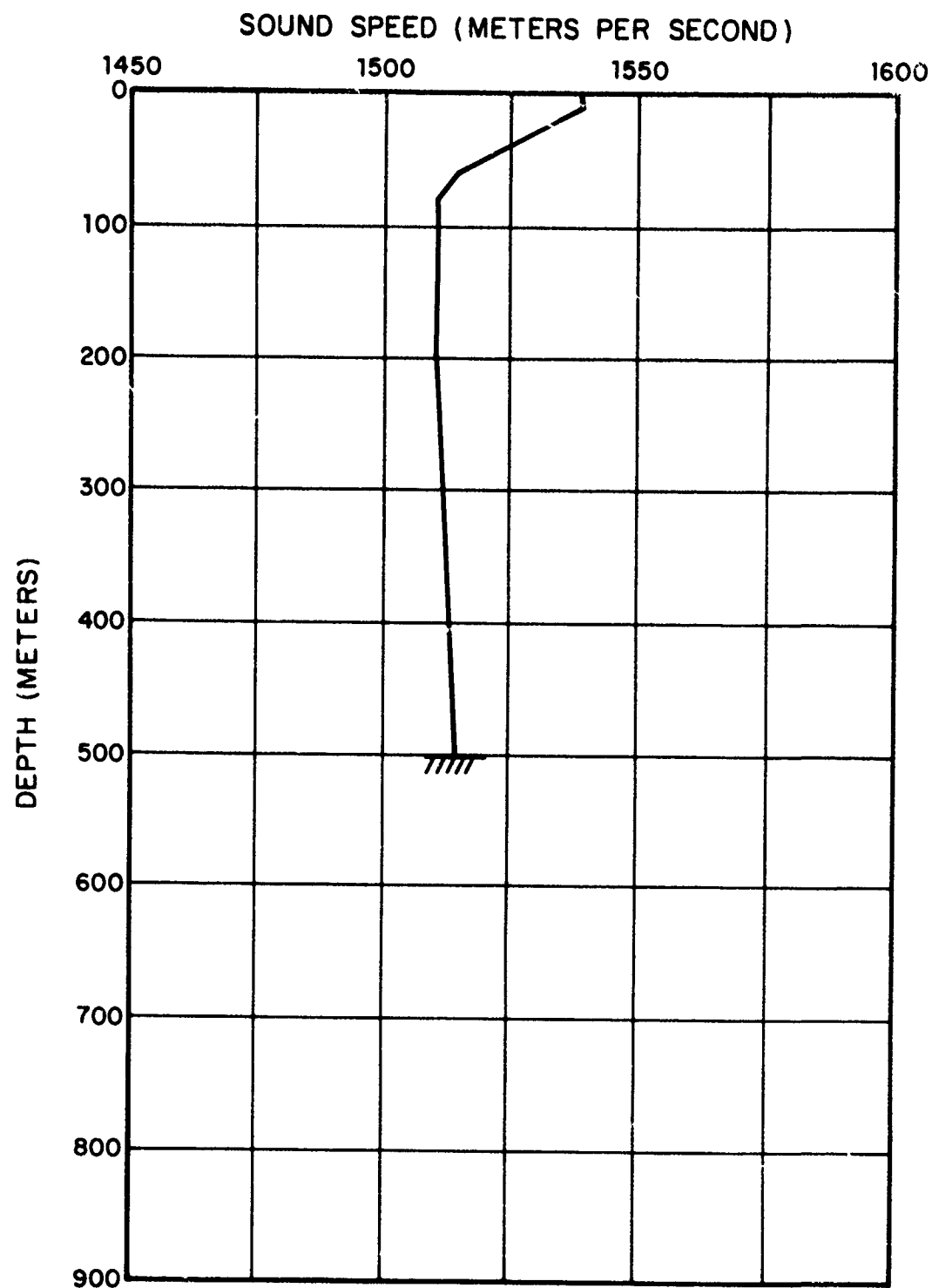
Arlington, Va. 22217

AD 310312

ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS
FOR ASW

Volume VII: AREA 3A SUMMER
PREDICTIONS FOR PASSIVE SONAR

Refer to Volume I of this report for an explanation of the
plot format and descriptions of models and ocean areas.



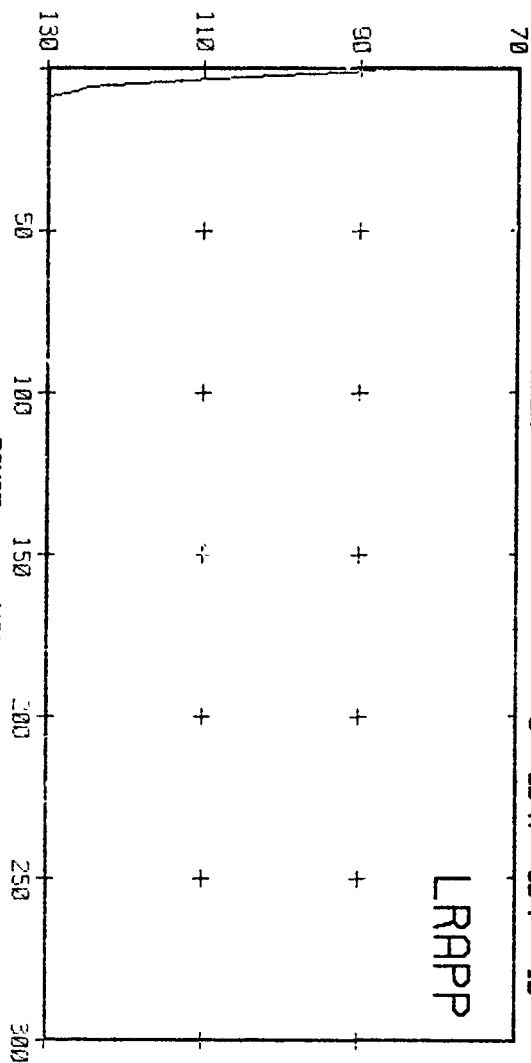
SOUND SPEED PROFILE
AREA 3A, SUMMER

AREA 3A SUMMER

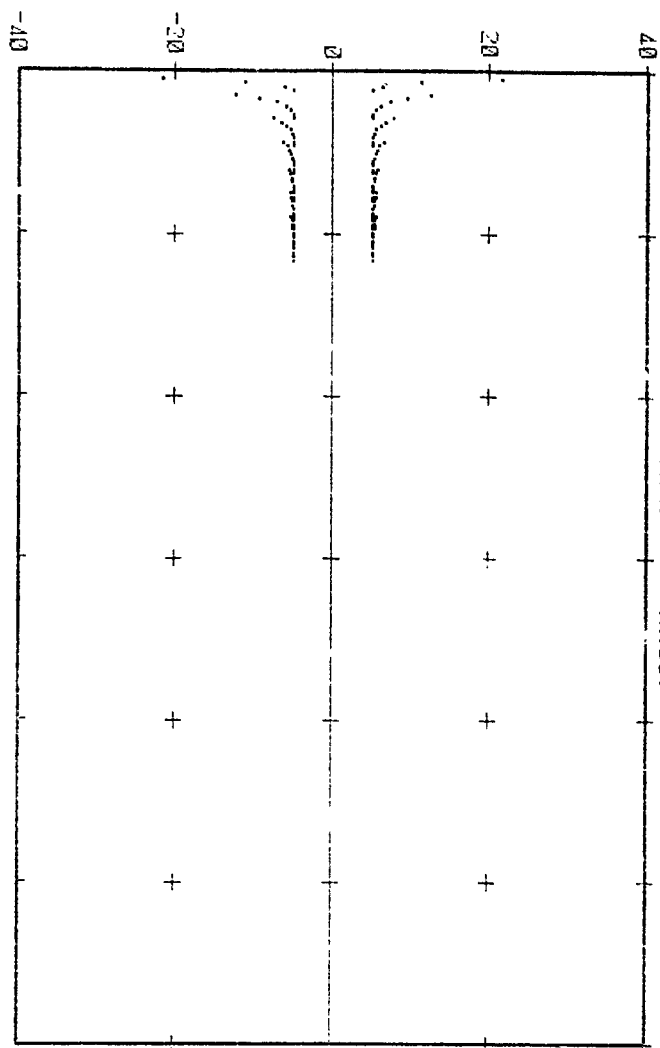
S 20 R 60 F 10

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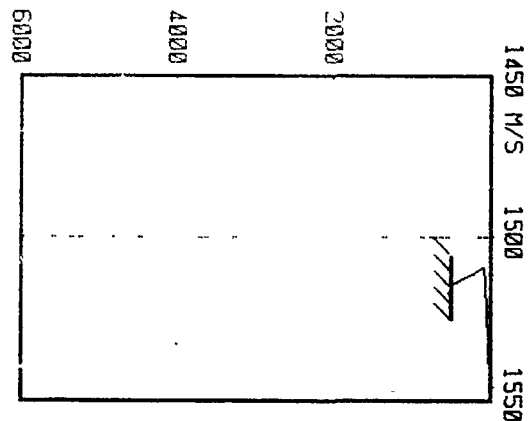
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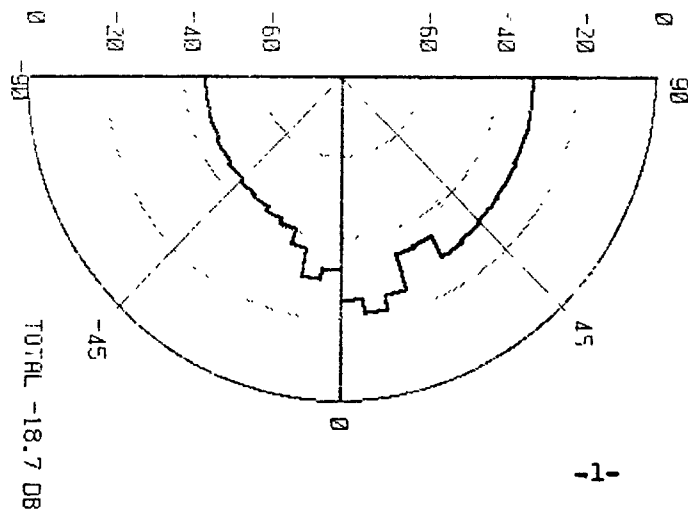
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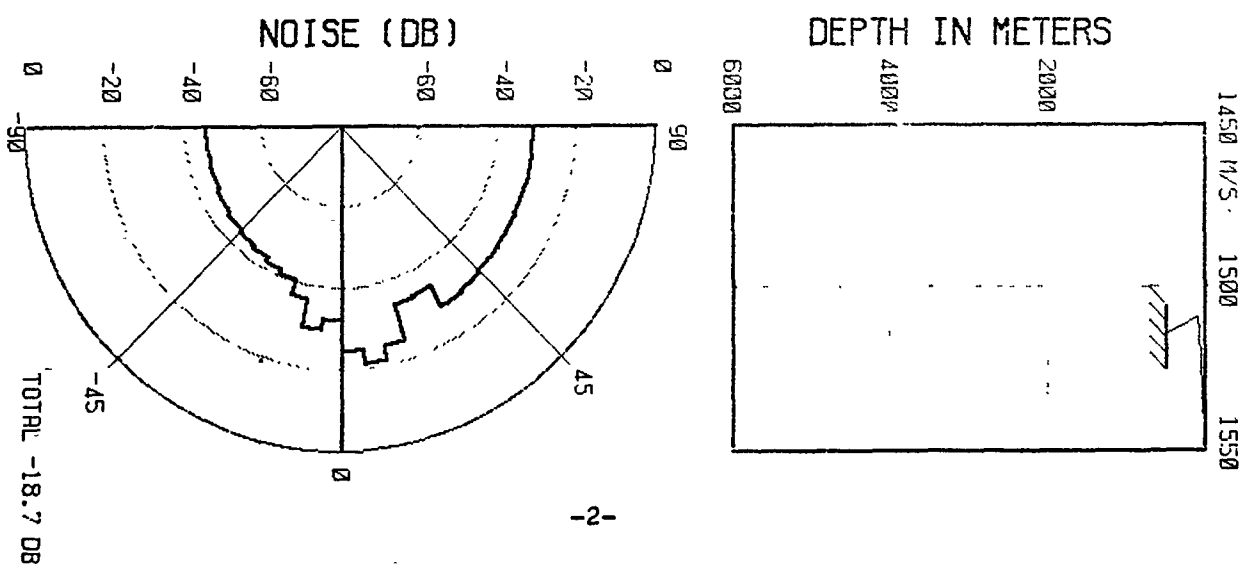
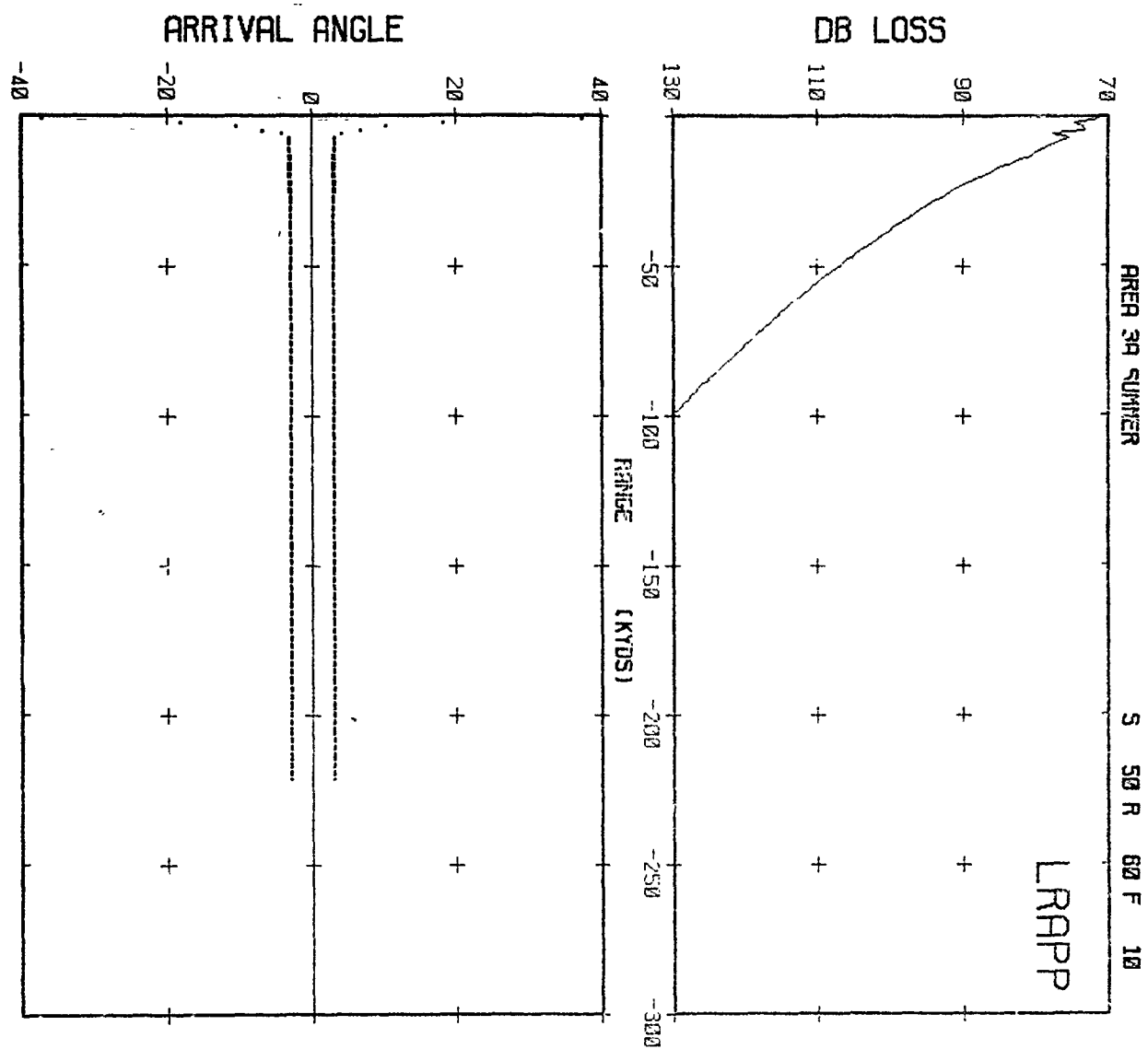


DEPTH IN METERS



NOISE (DB)



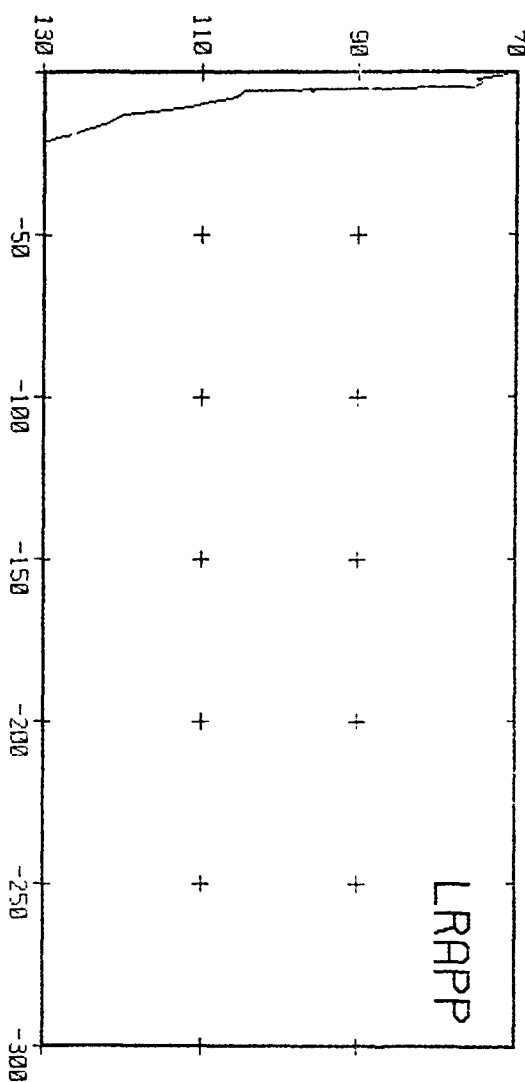


AREA 3R SUMMER

S 233 R 60 F 10

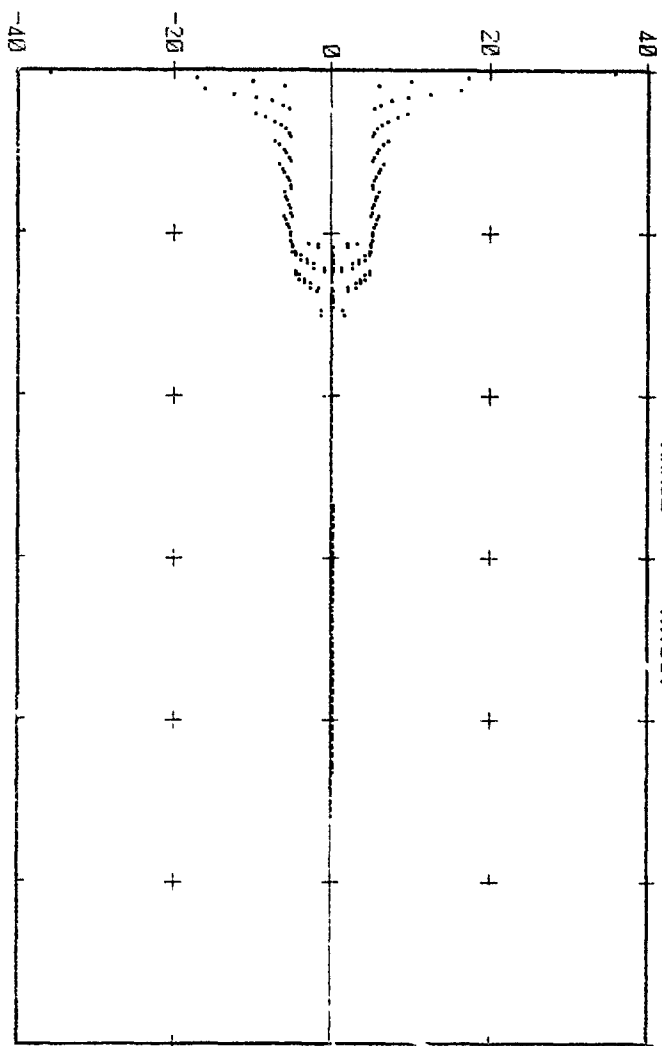
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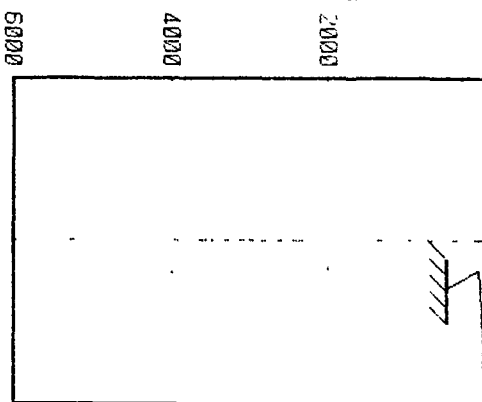


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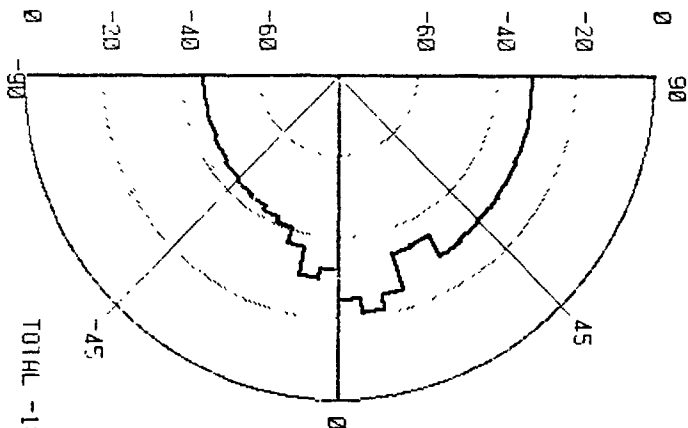
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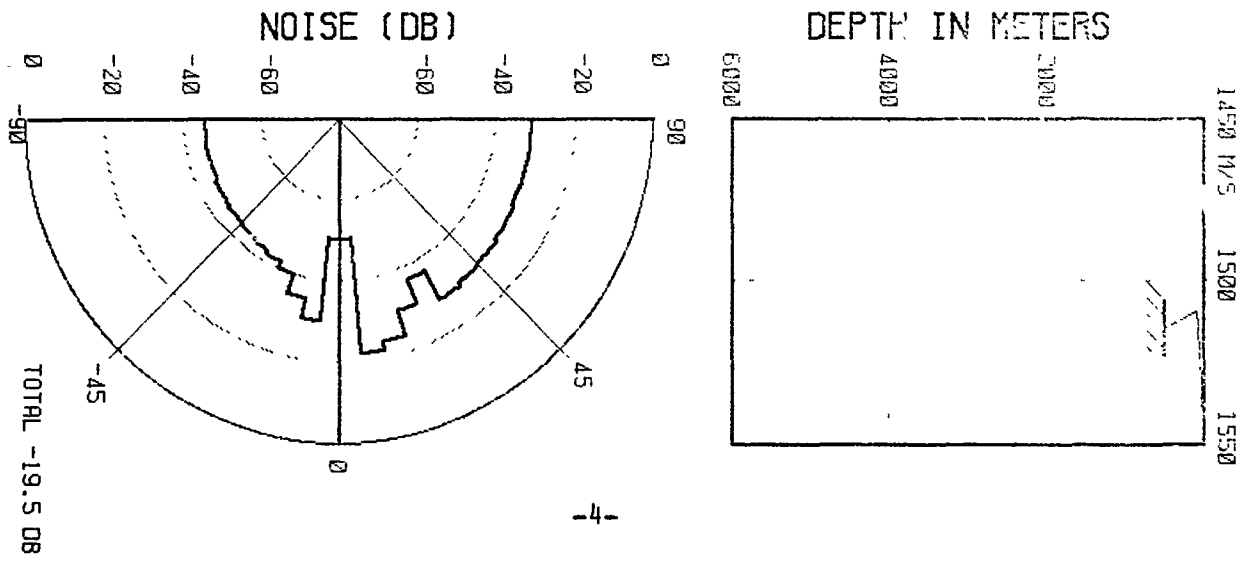
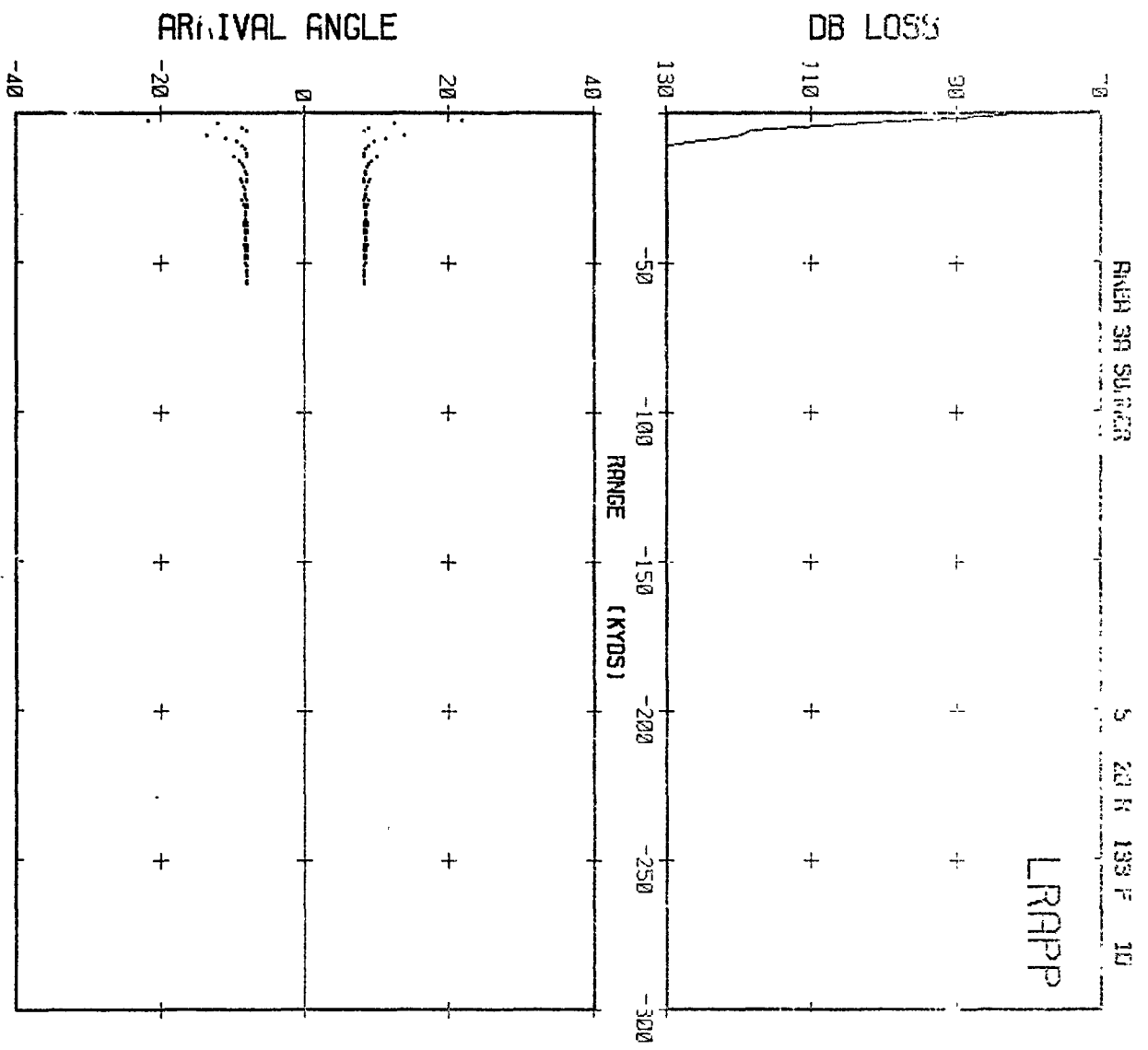
DEPTH IN METERS



NOISE (DB)



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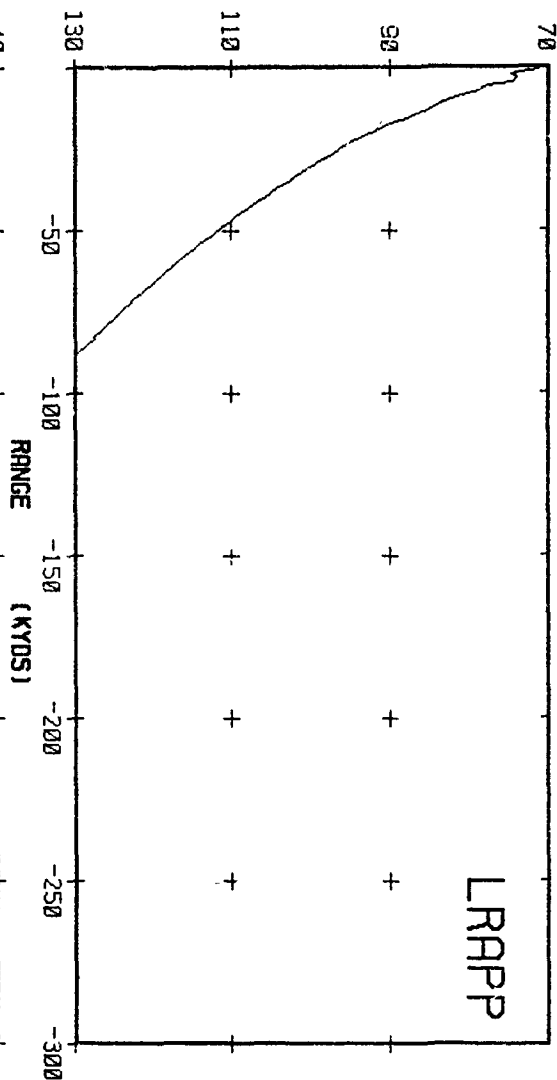


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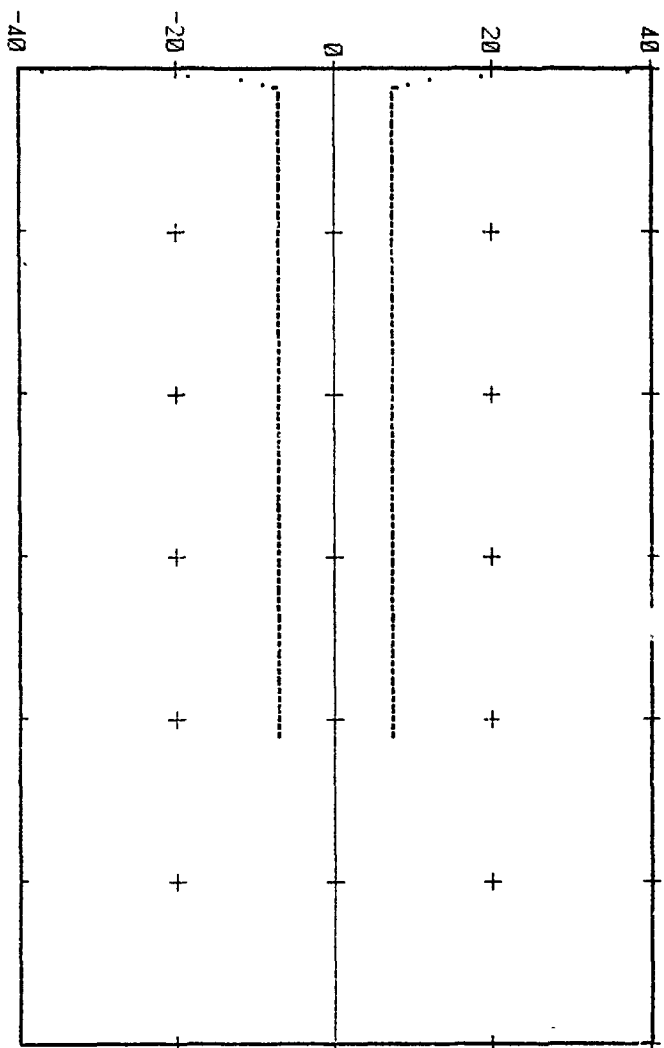
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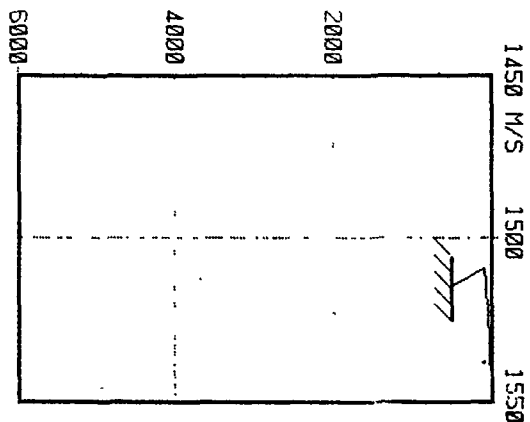
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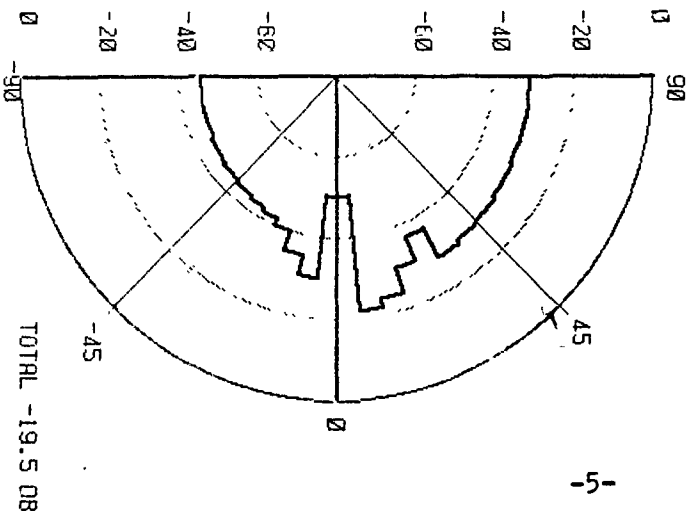
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DEPTH IN METERS



NOISE (DB)



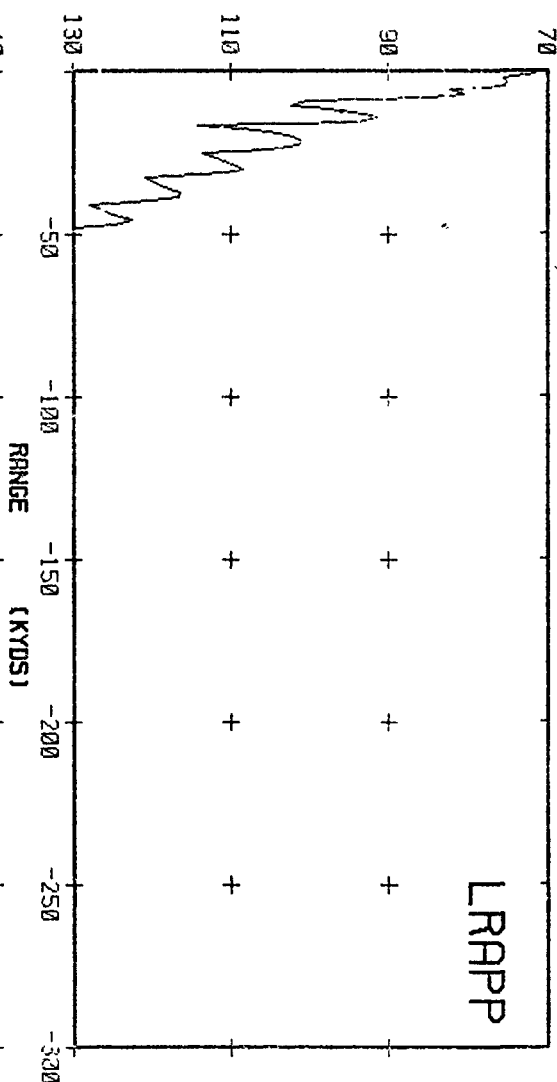
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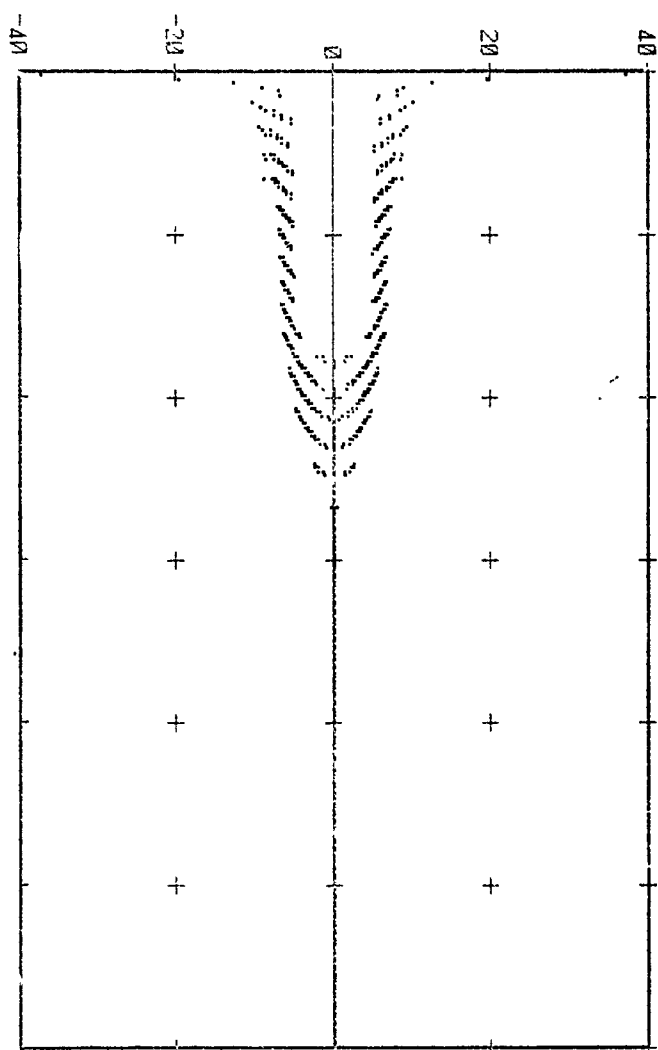
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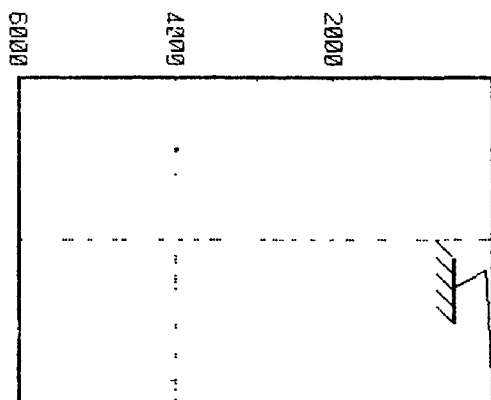
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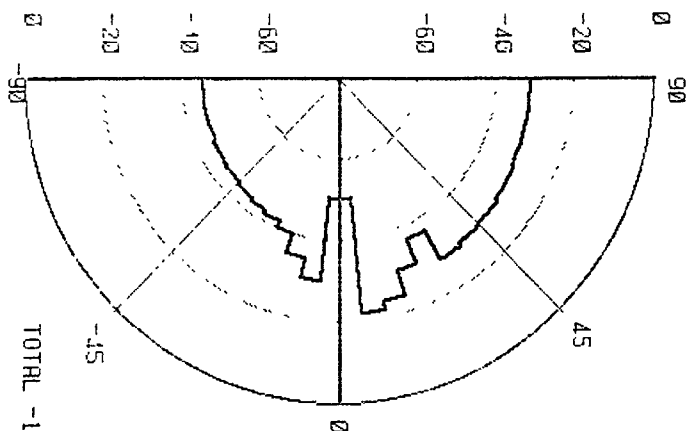
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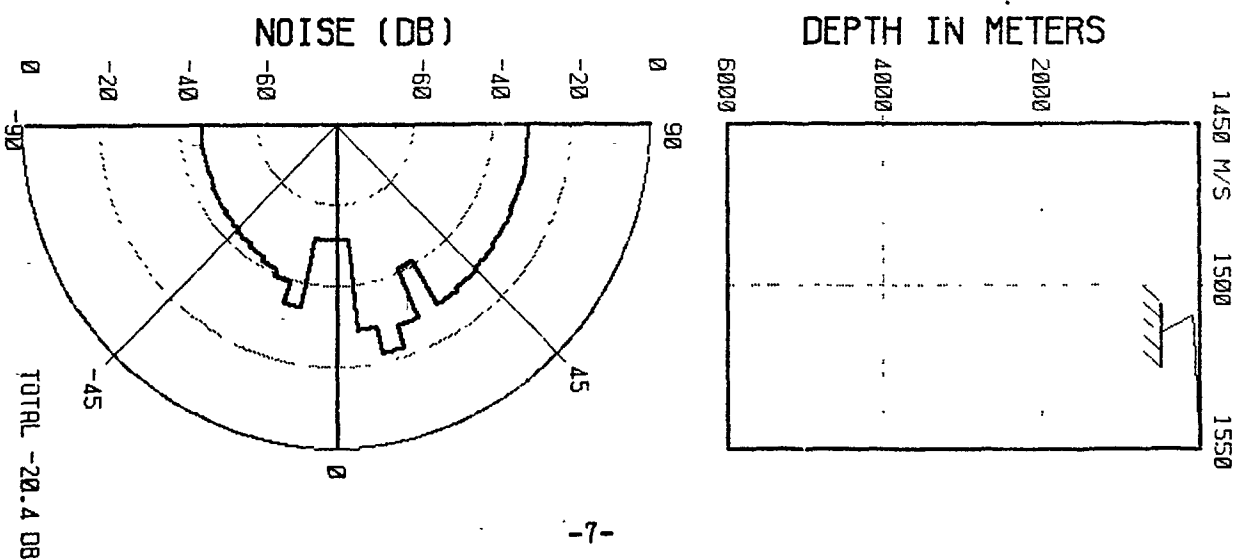
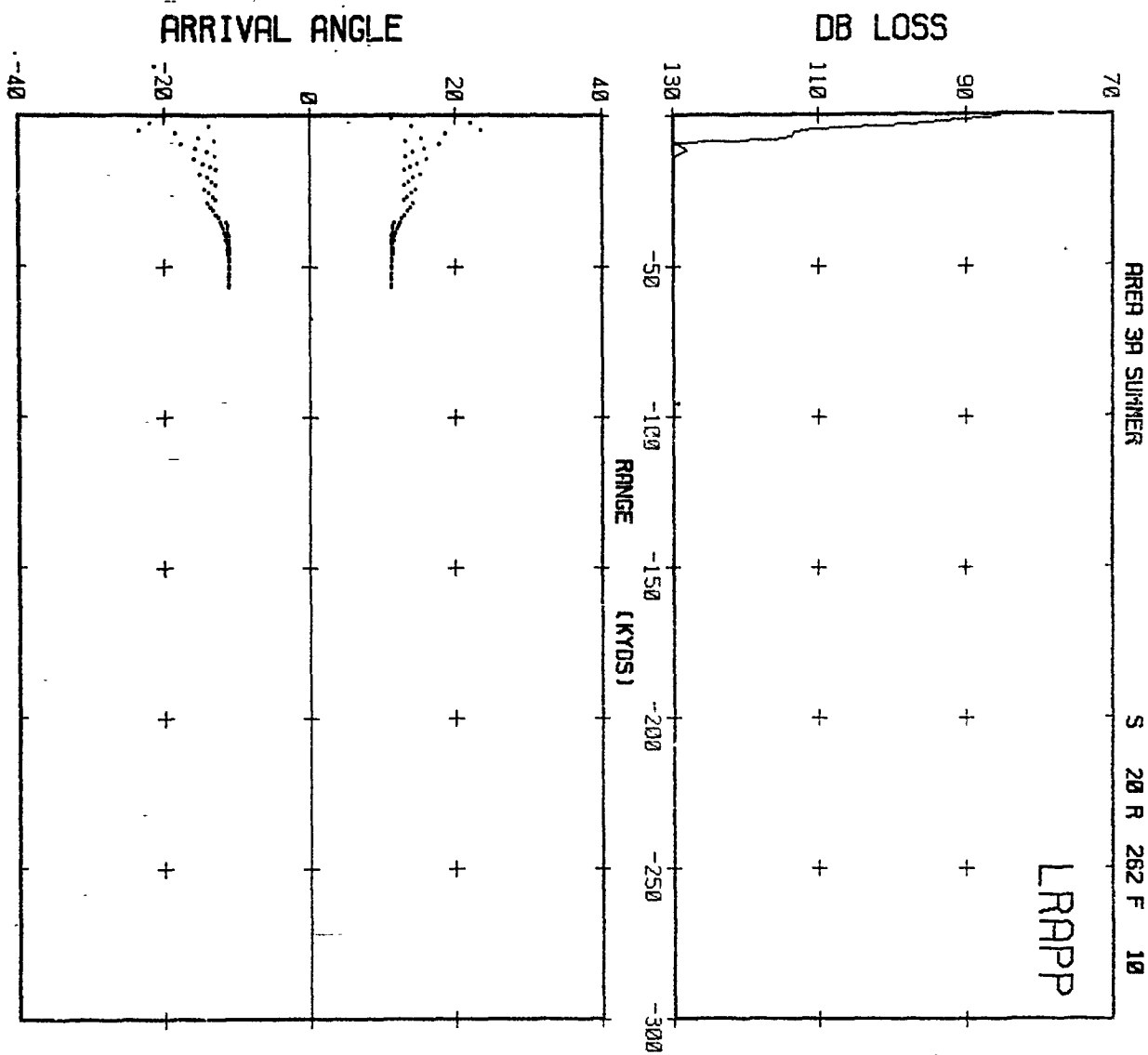


DEPTH IN METERS



NOISE (DB)



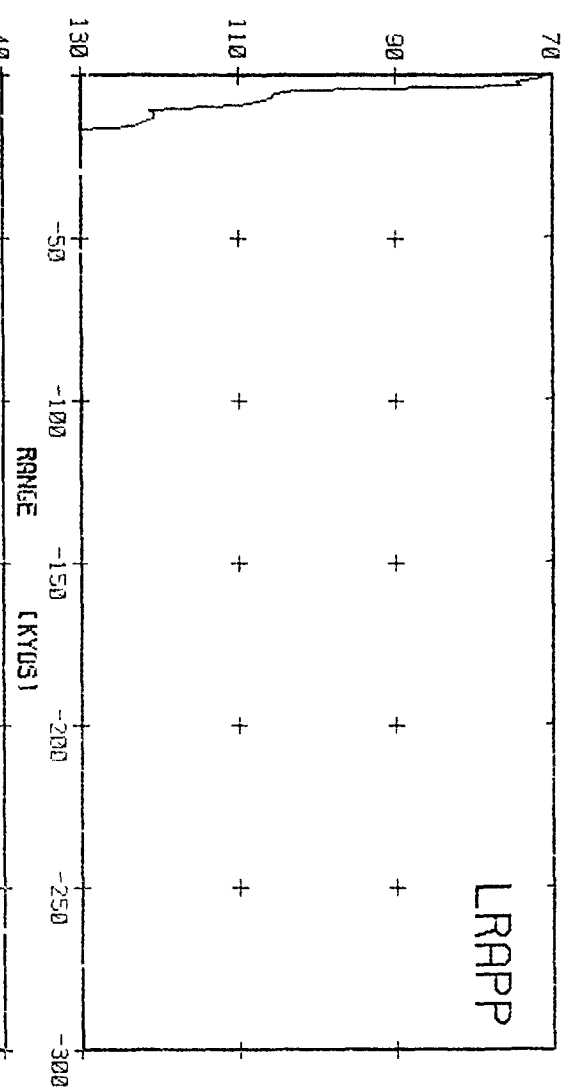


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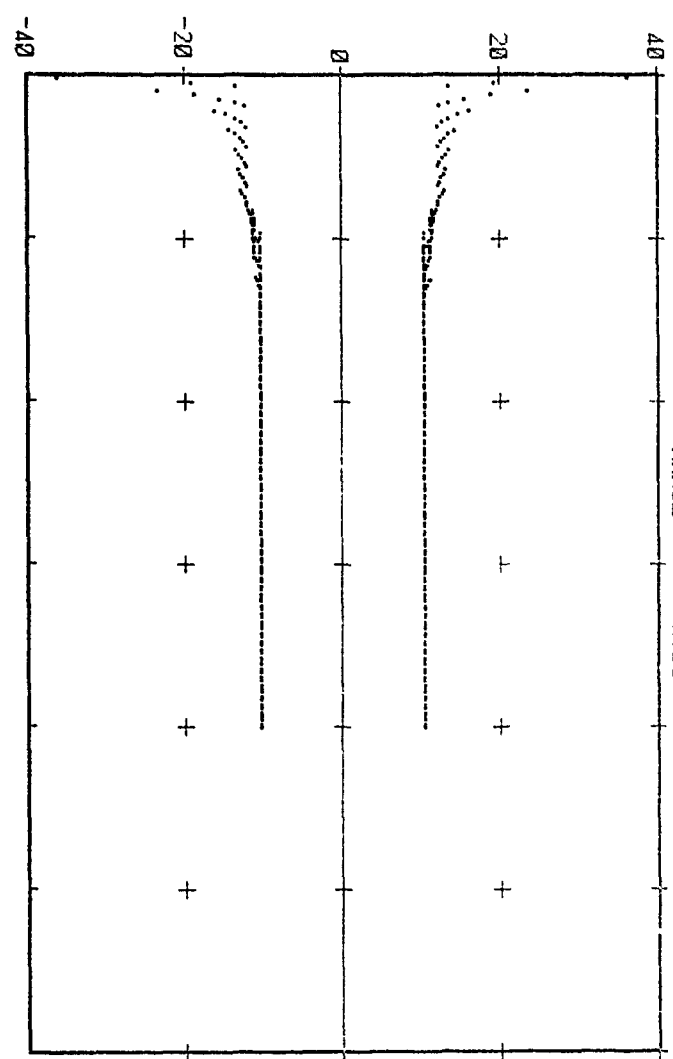
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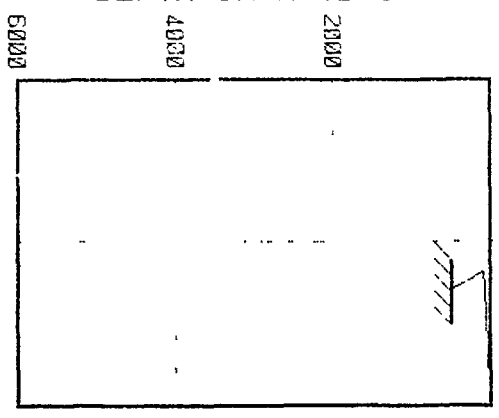
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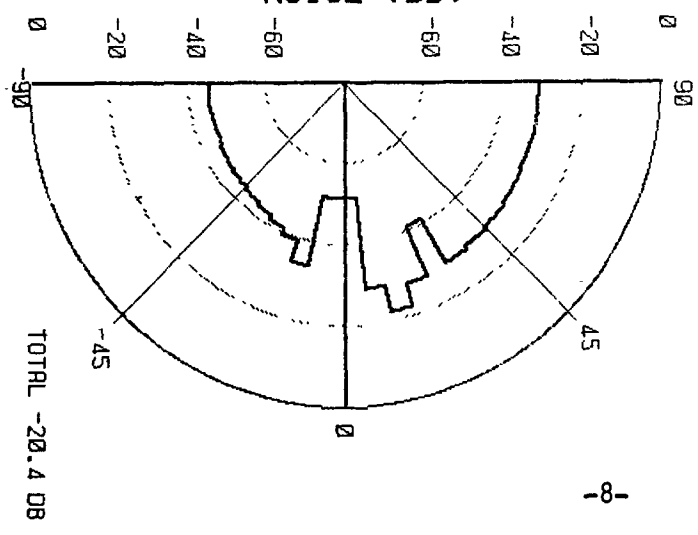
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

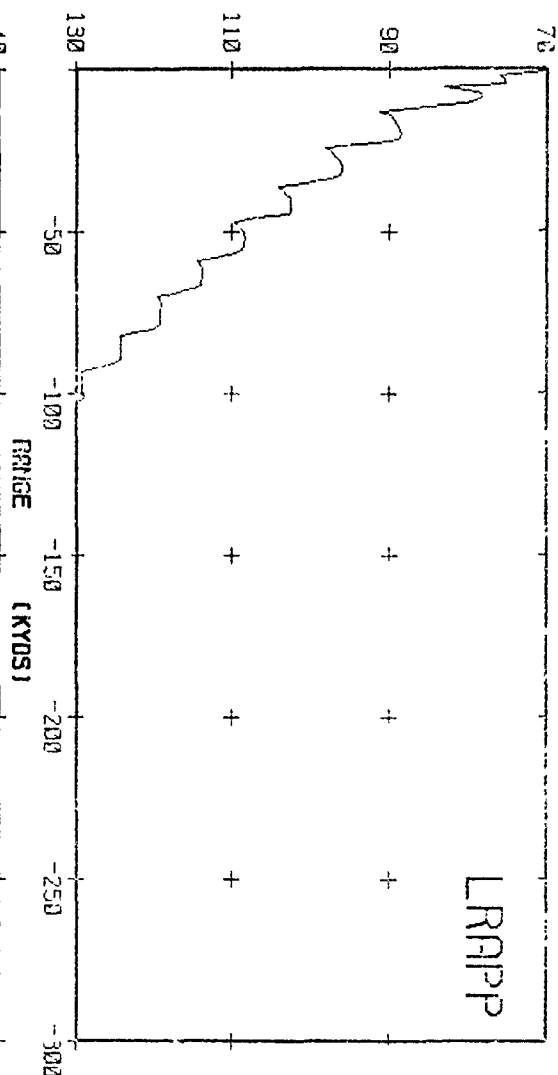


FINER 30 SURFER

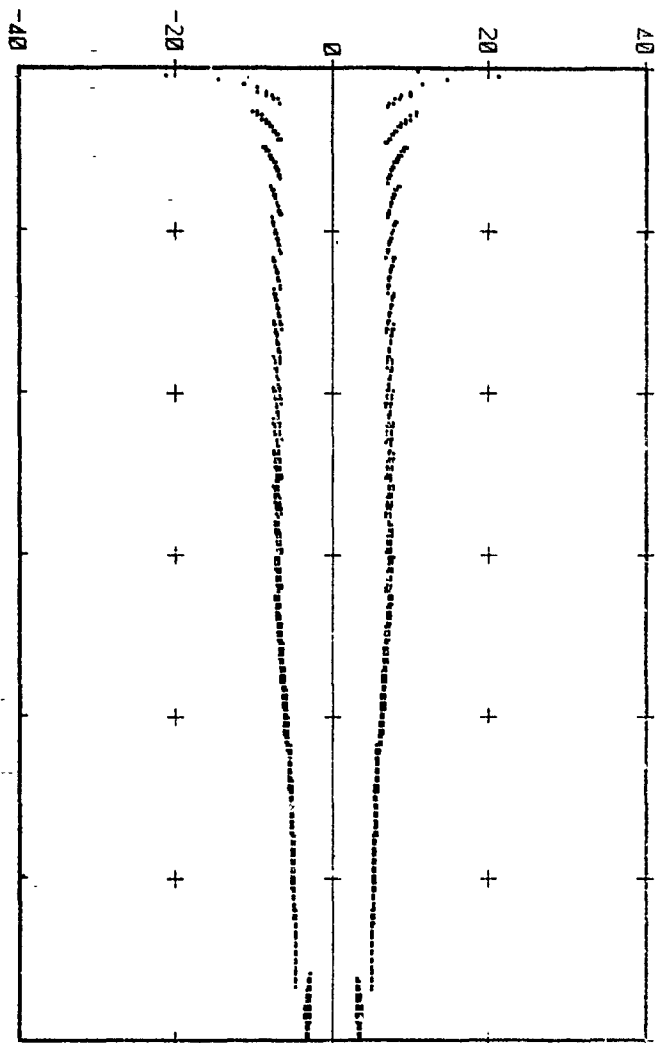
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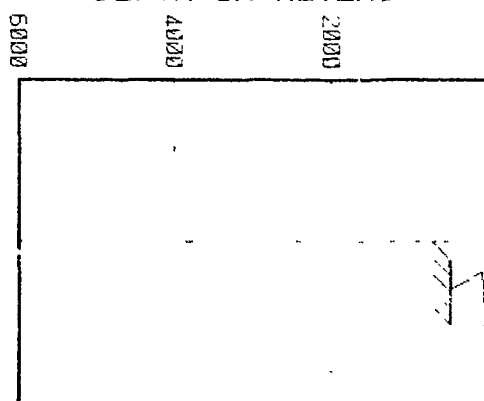
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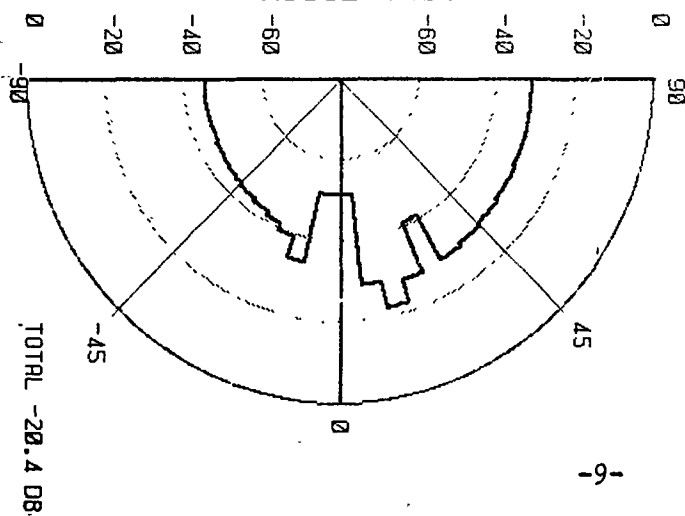
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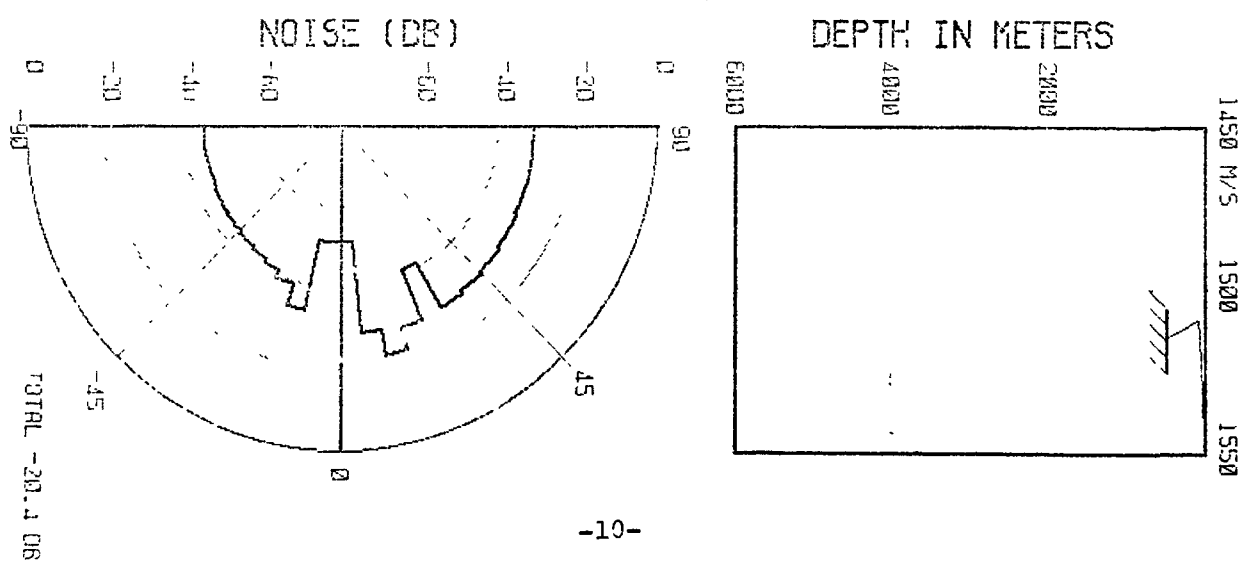
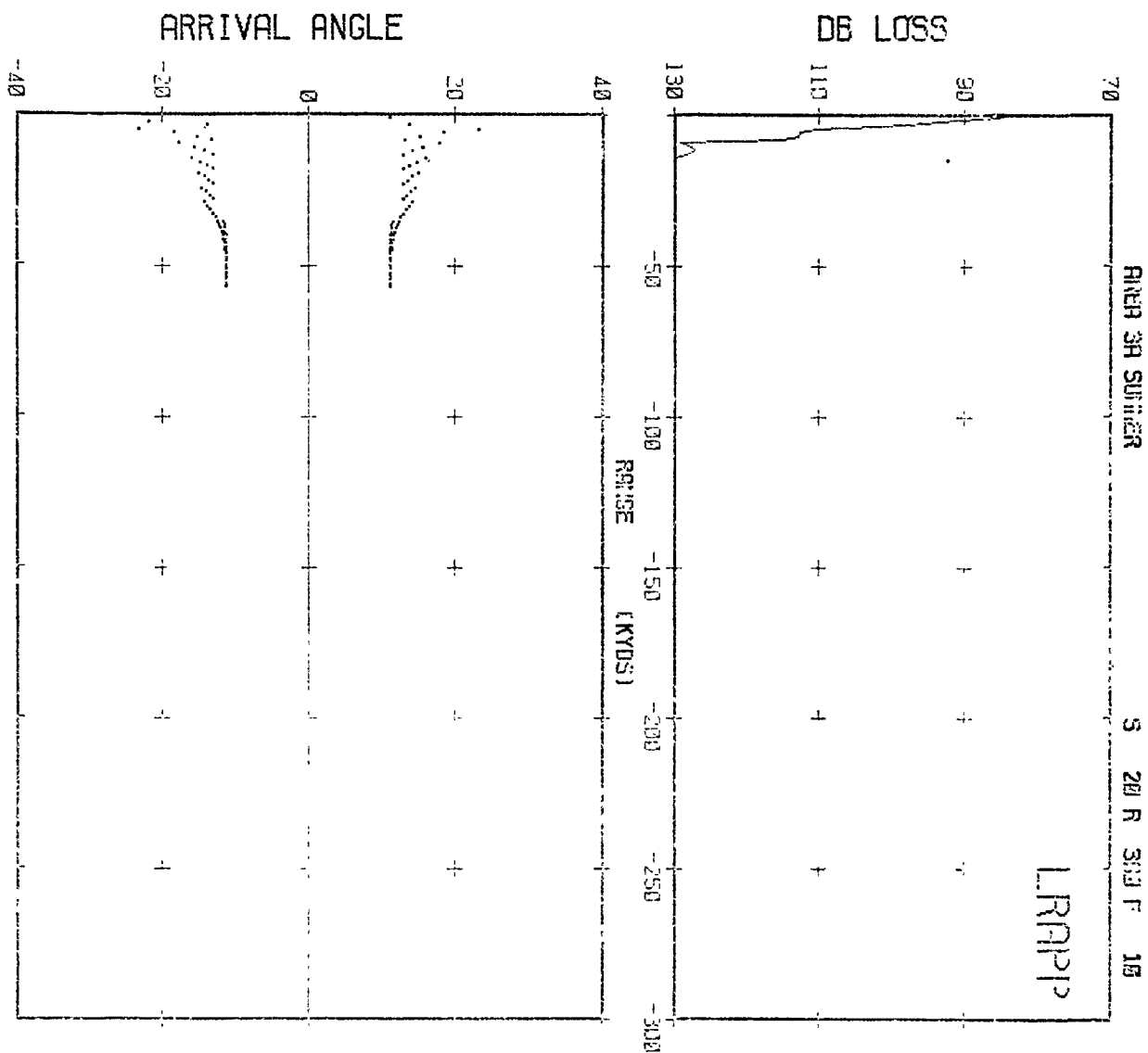


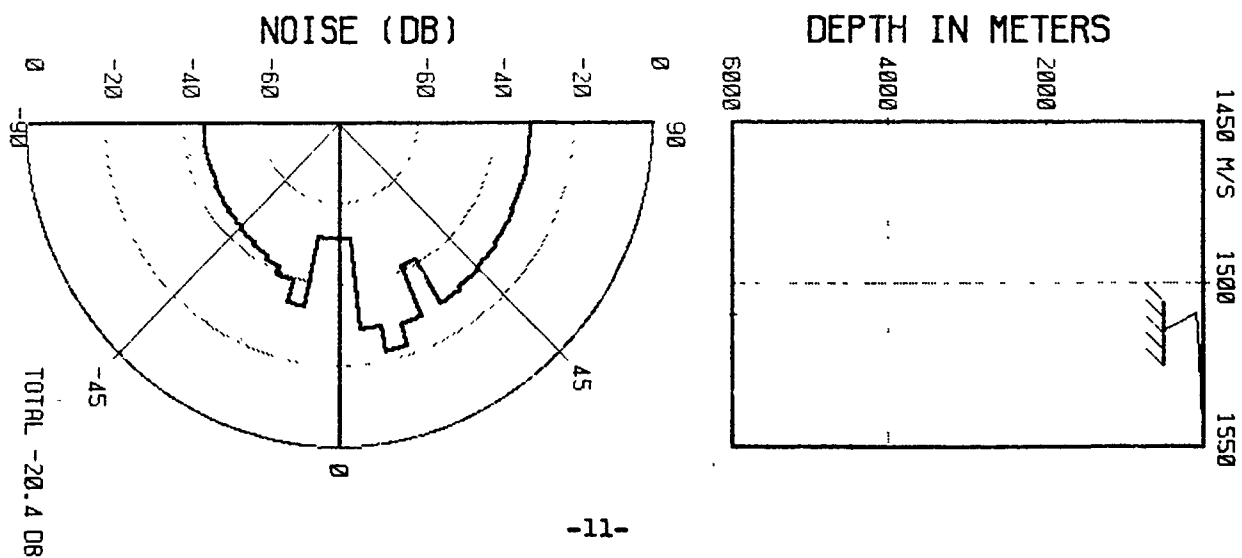
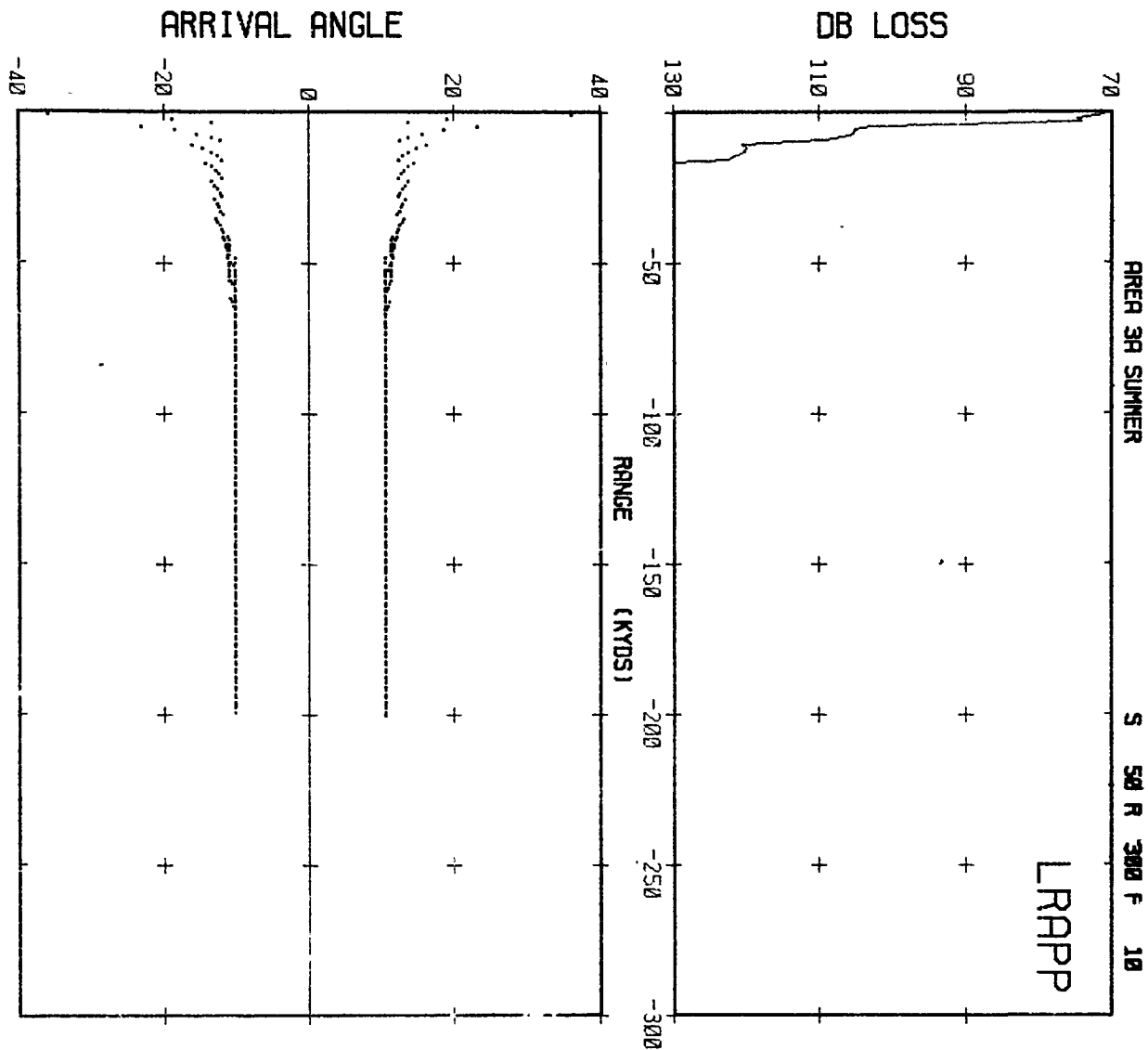
DEPTH IN METERS

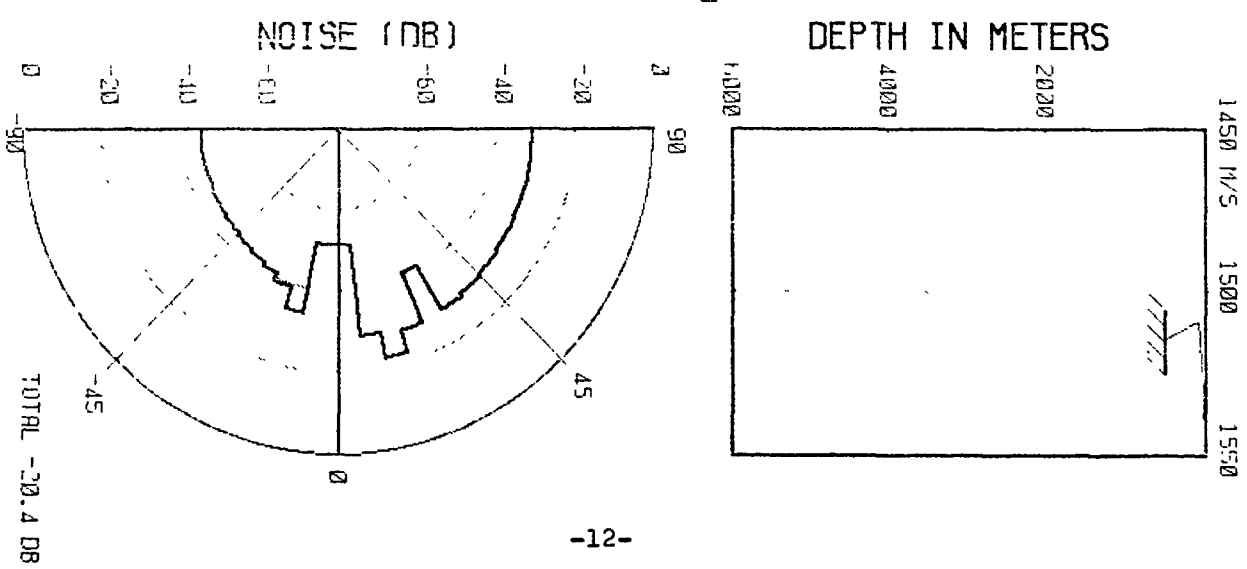
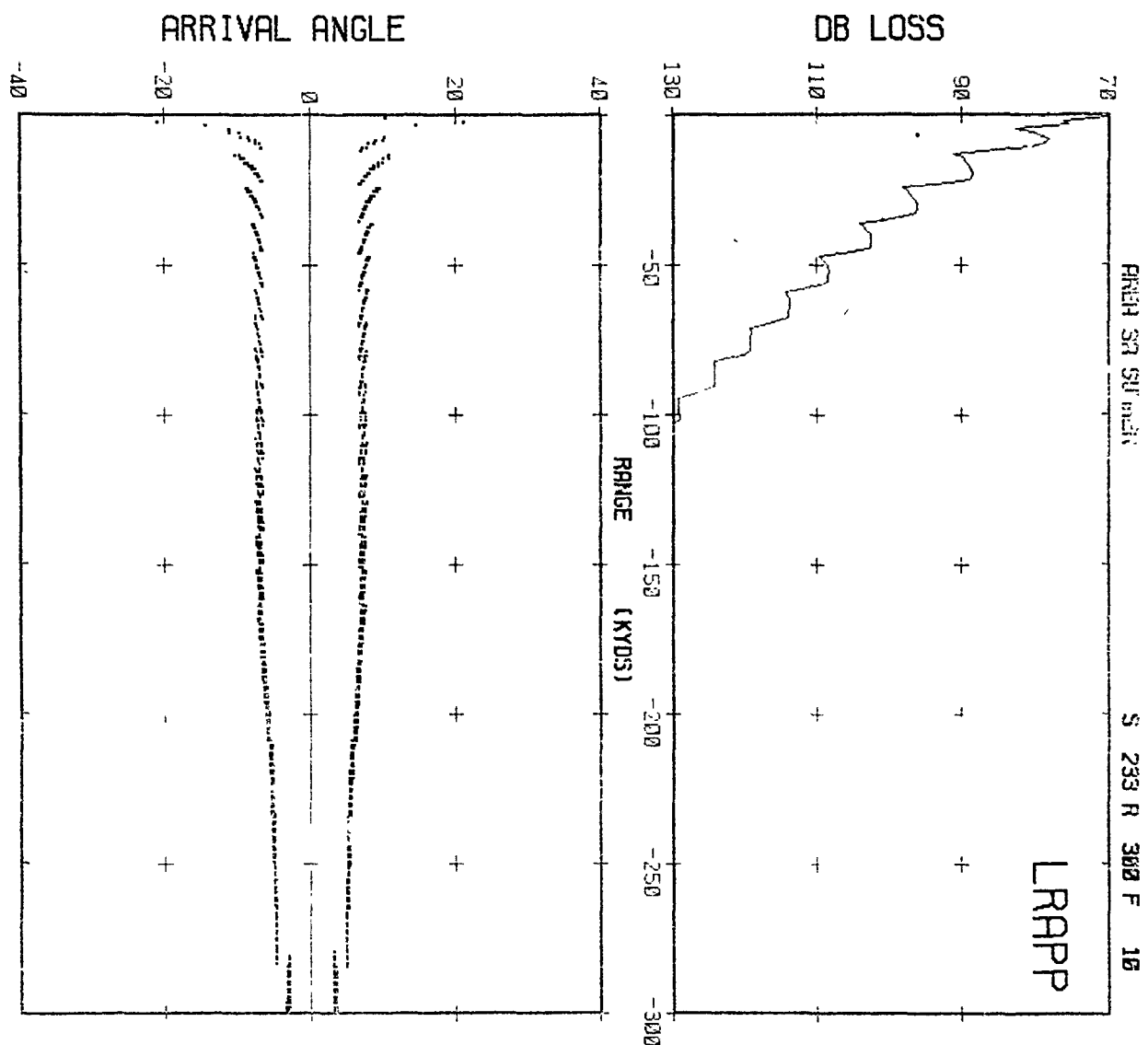


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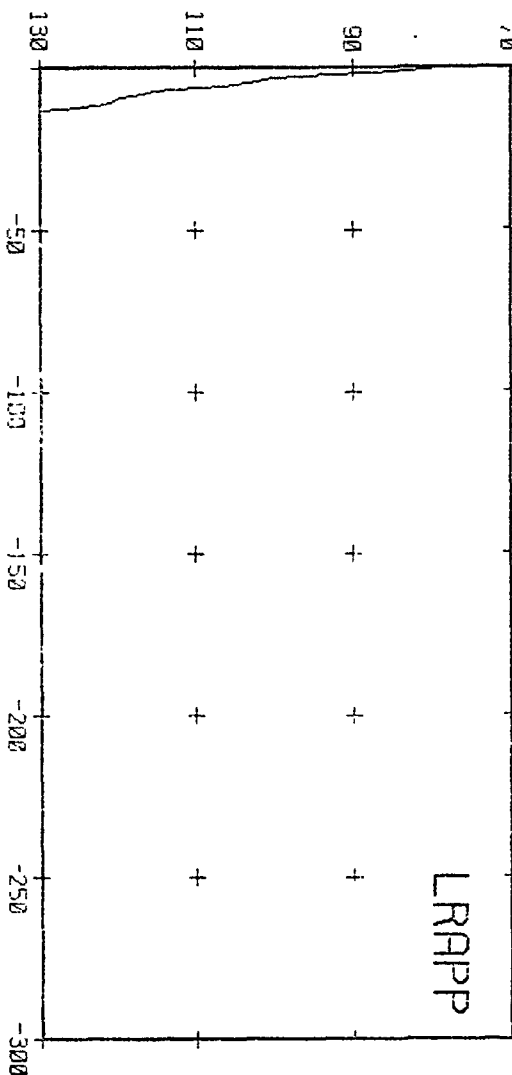


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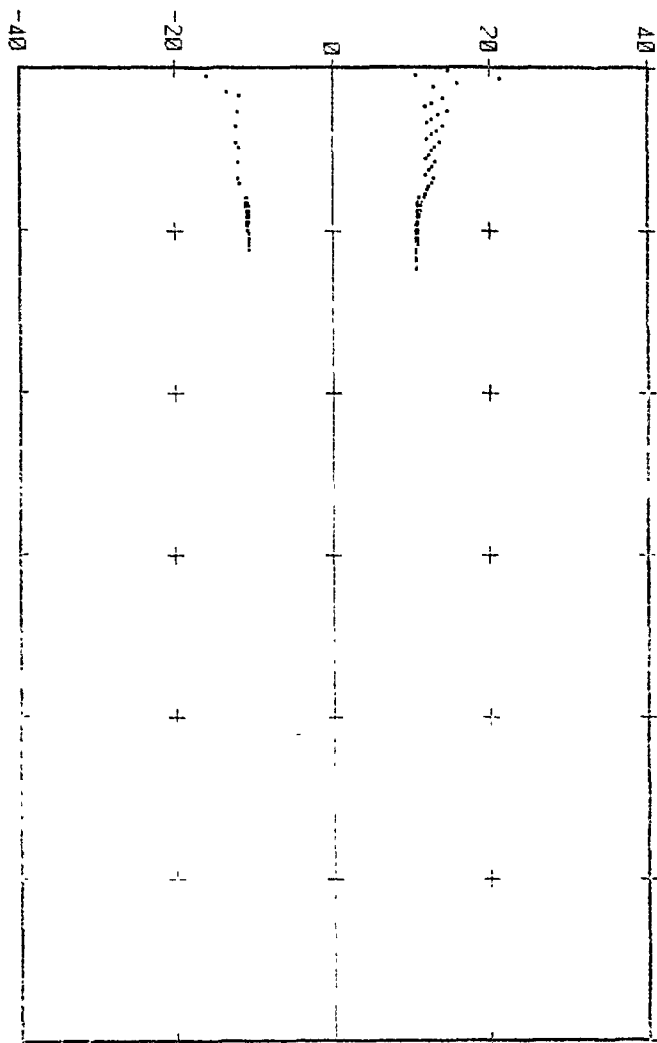
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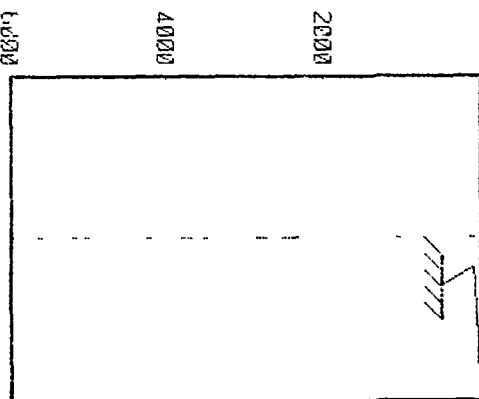
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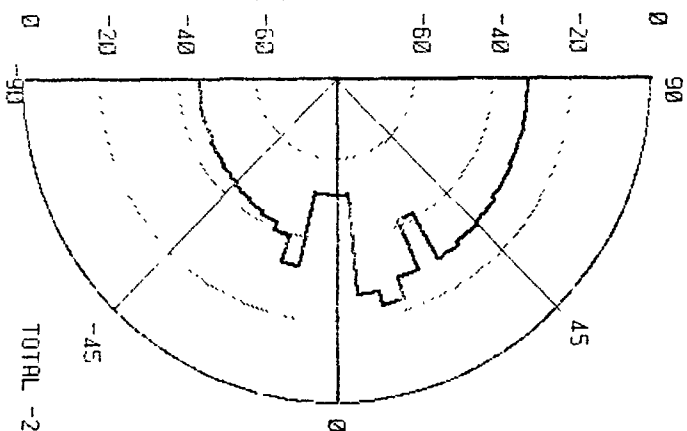
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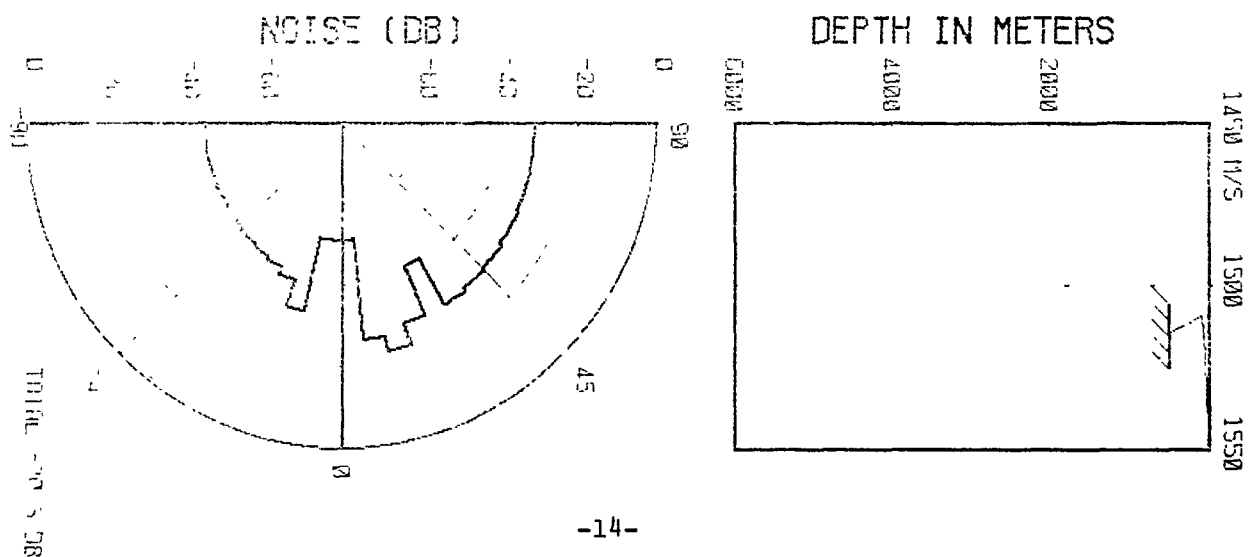
DEPTH IN METERS



NOISE (DB)



TOTAL -20.5 CB

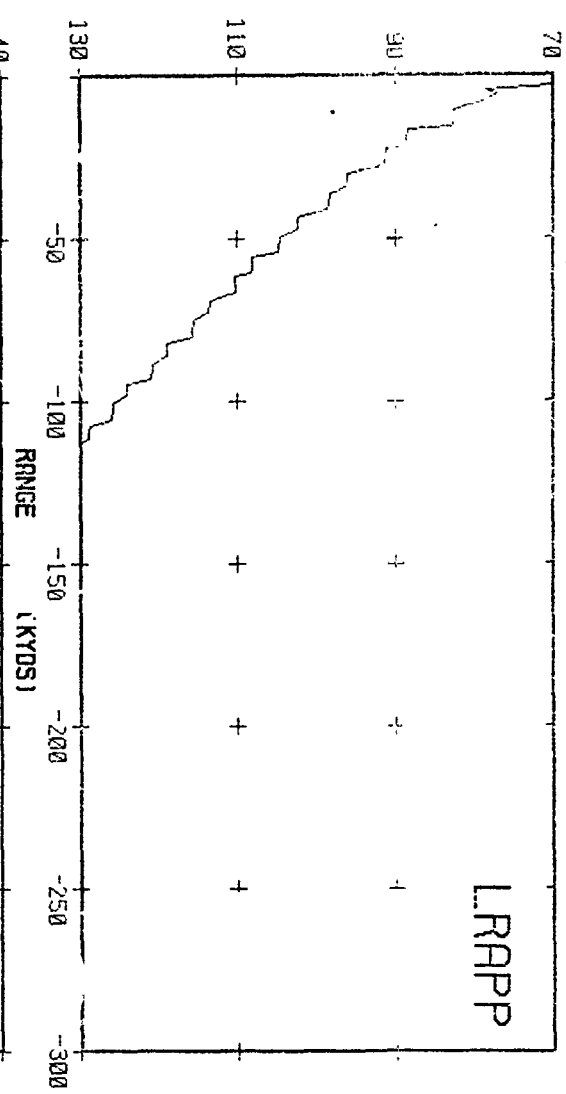


OPER 3R SUMMER

S 233 R 1000 F 10

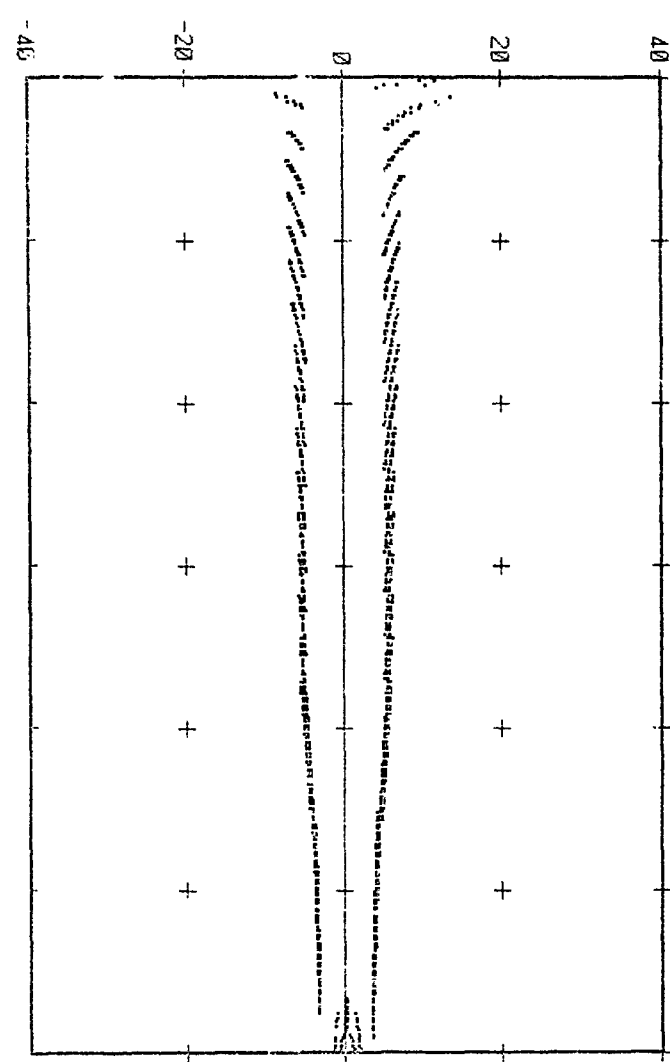
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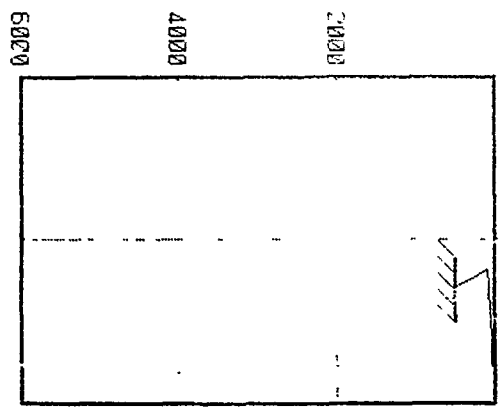


L.RAPP

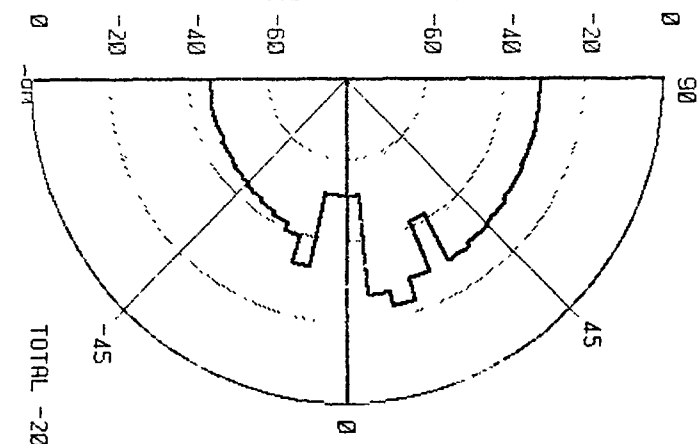
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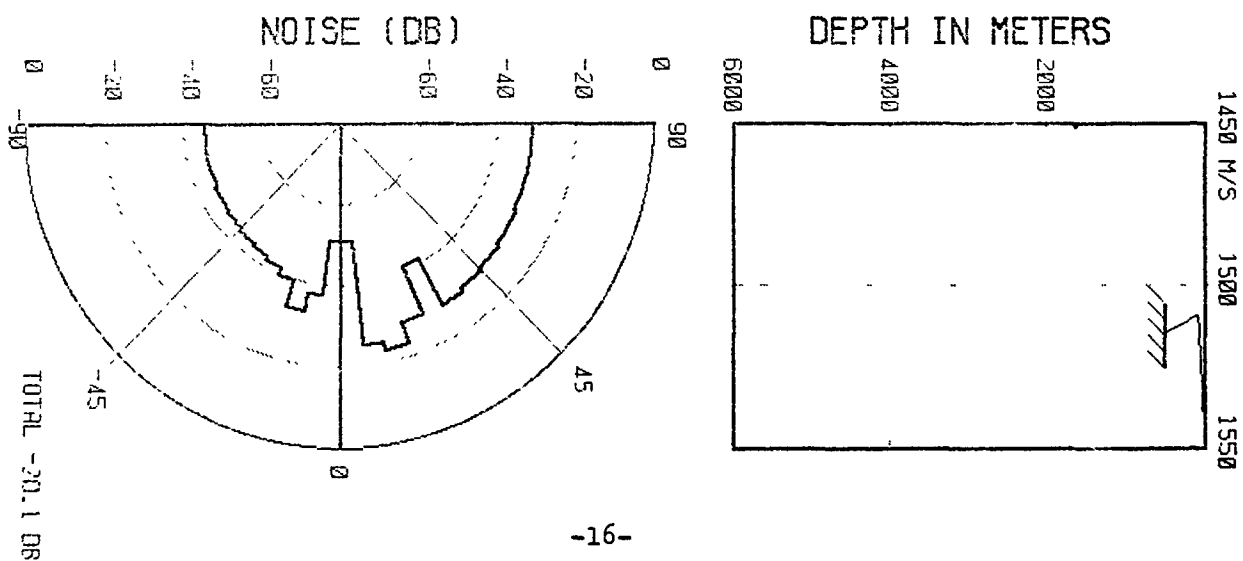
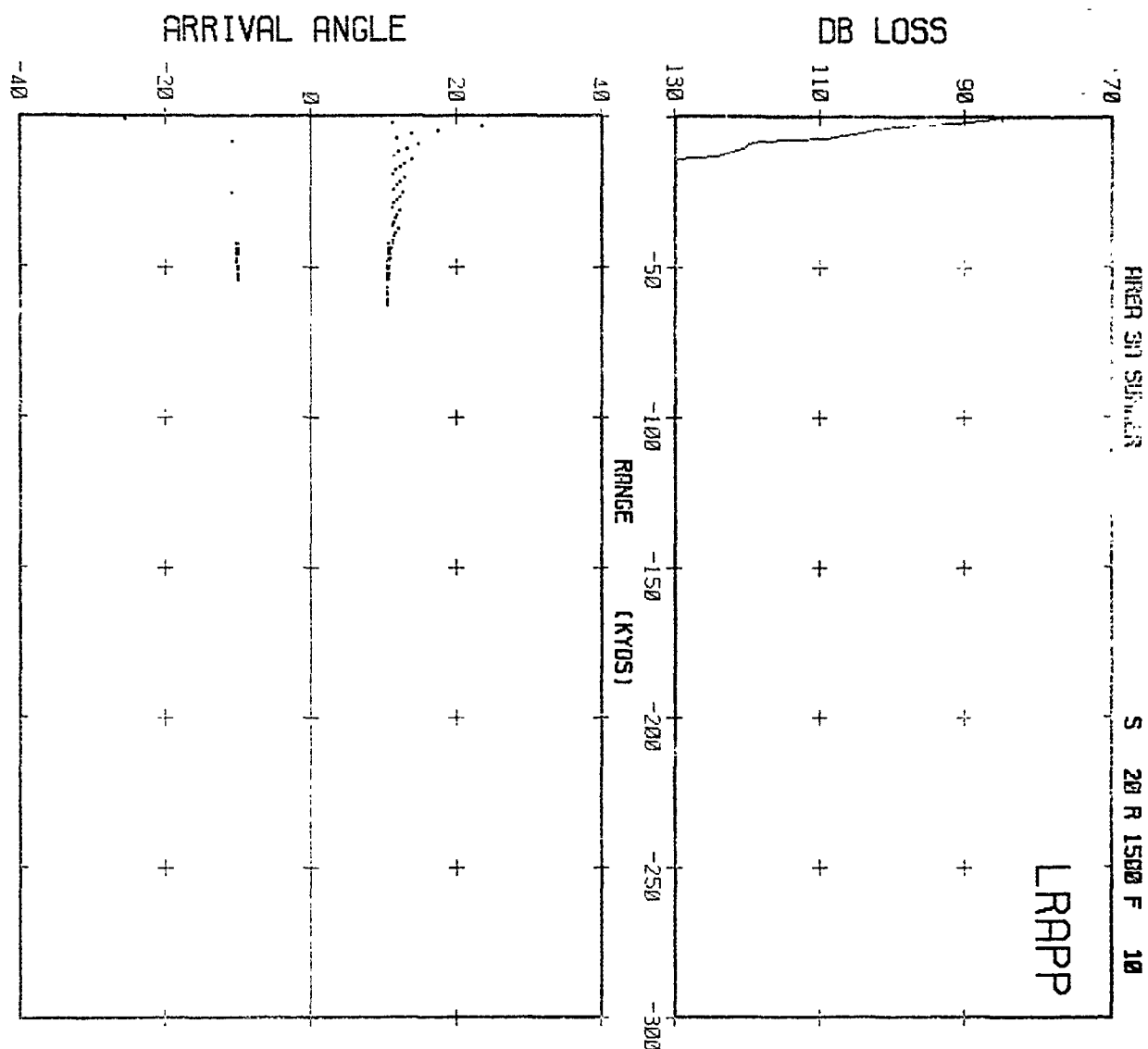
DEPTH IN METERS



NOISE (DB)



TOTAL -20.3 DB

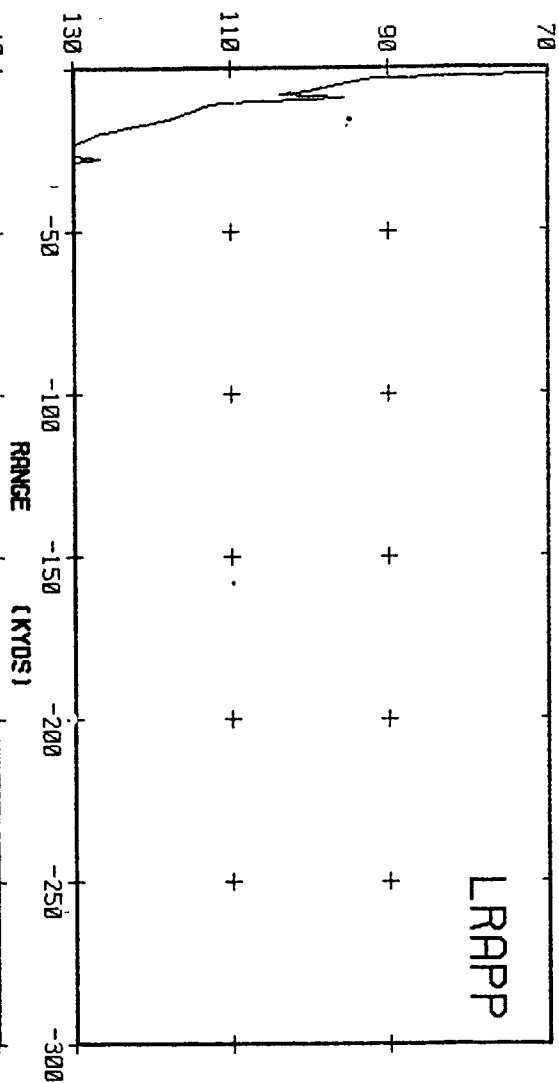


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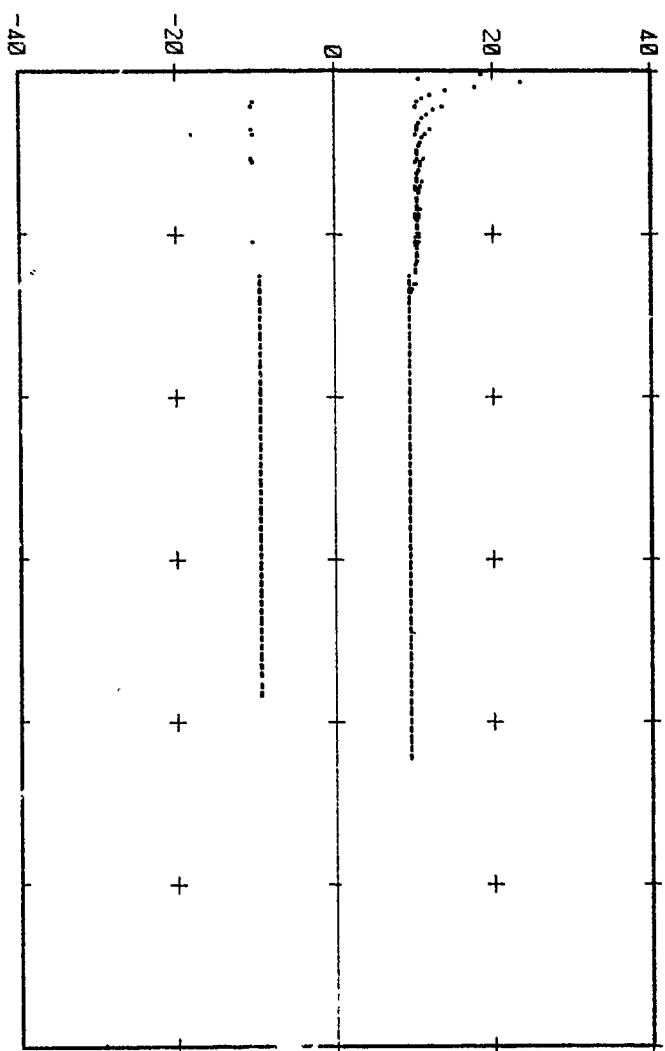
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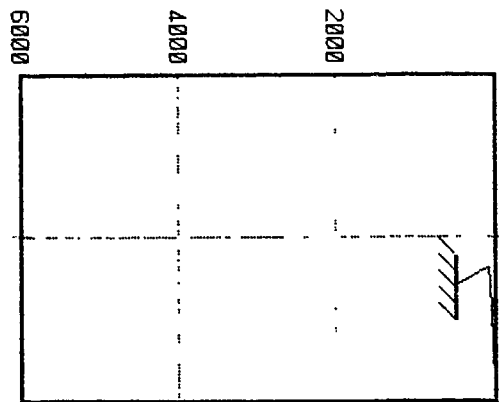
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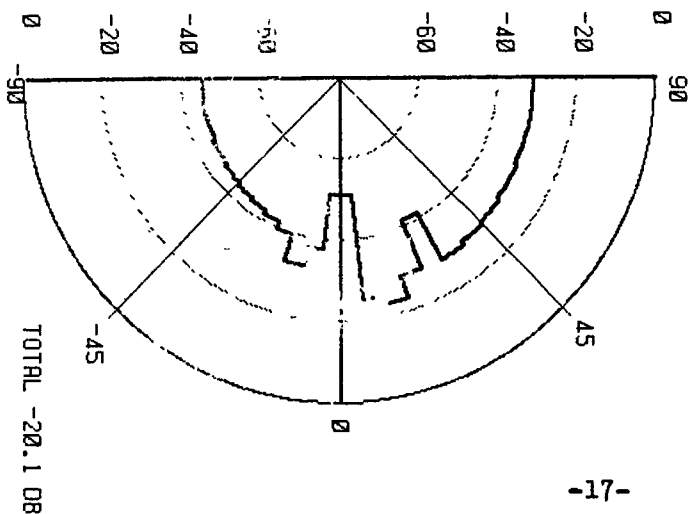
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

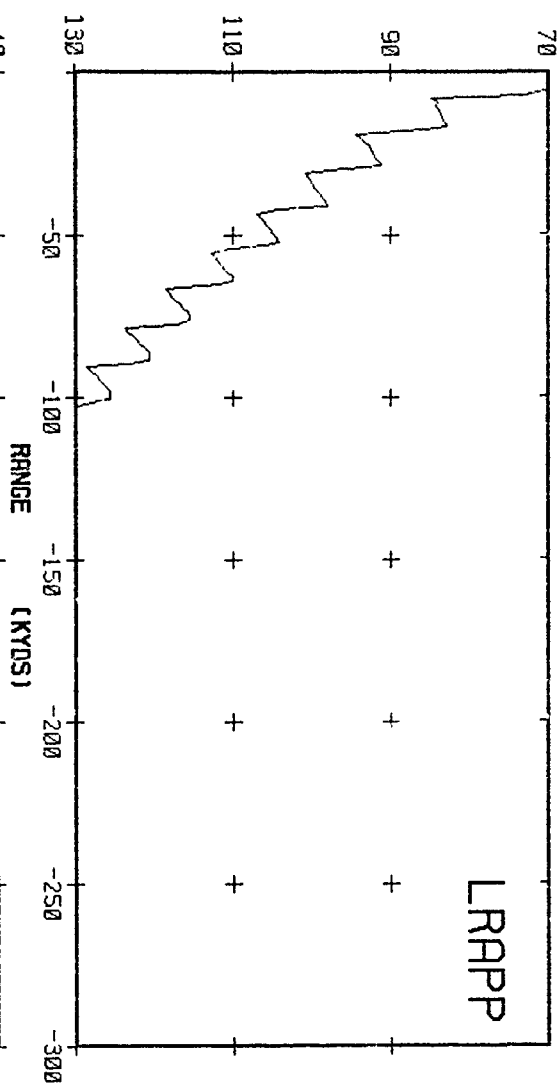


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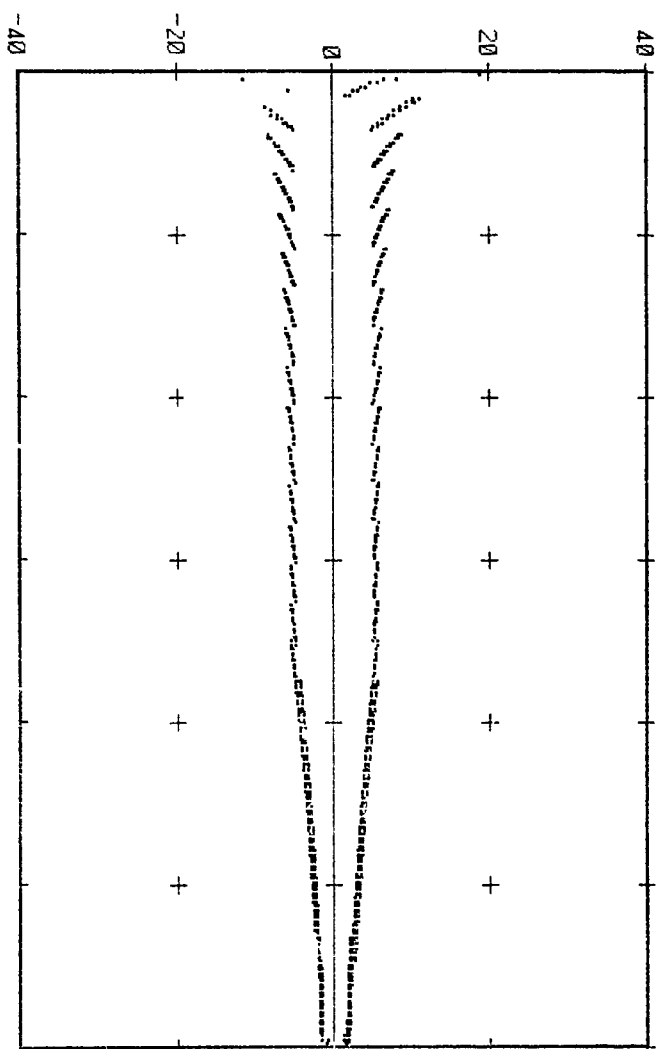
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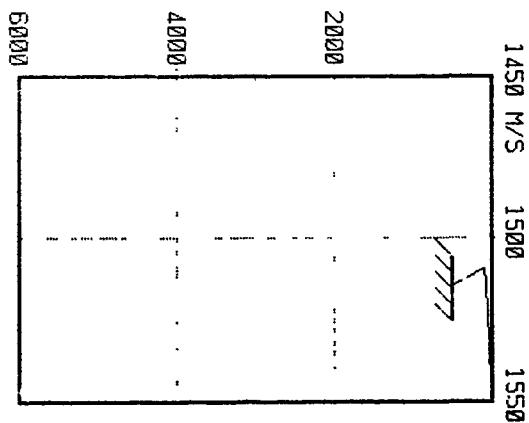
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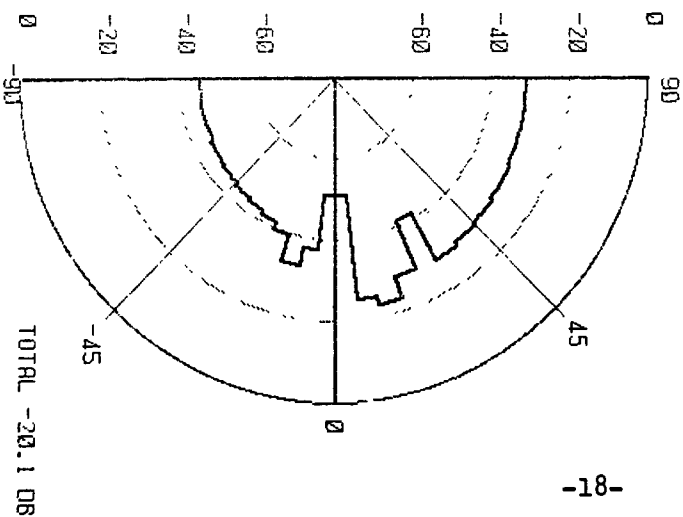
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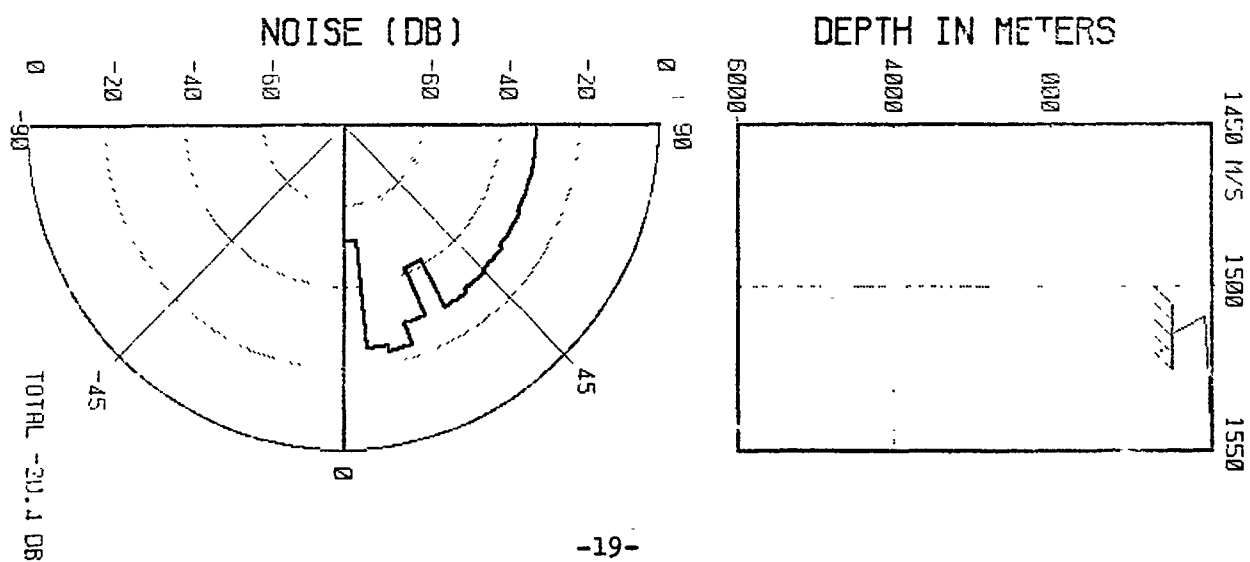
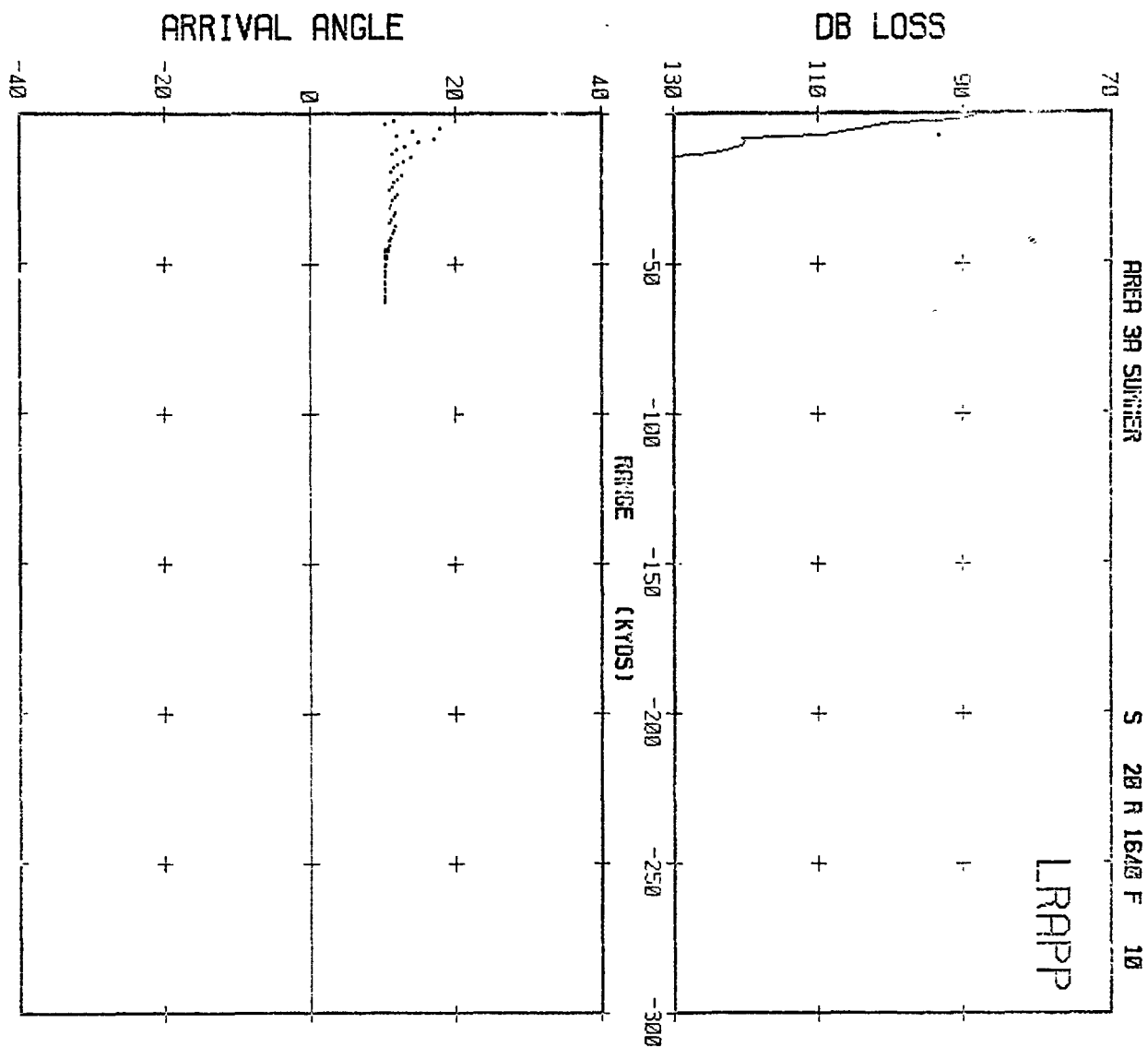


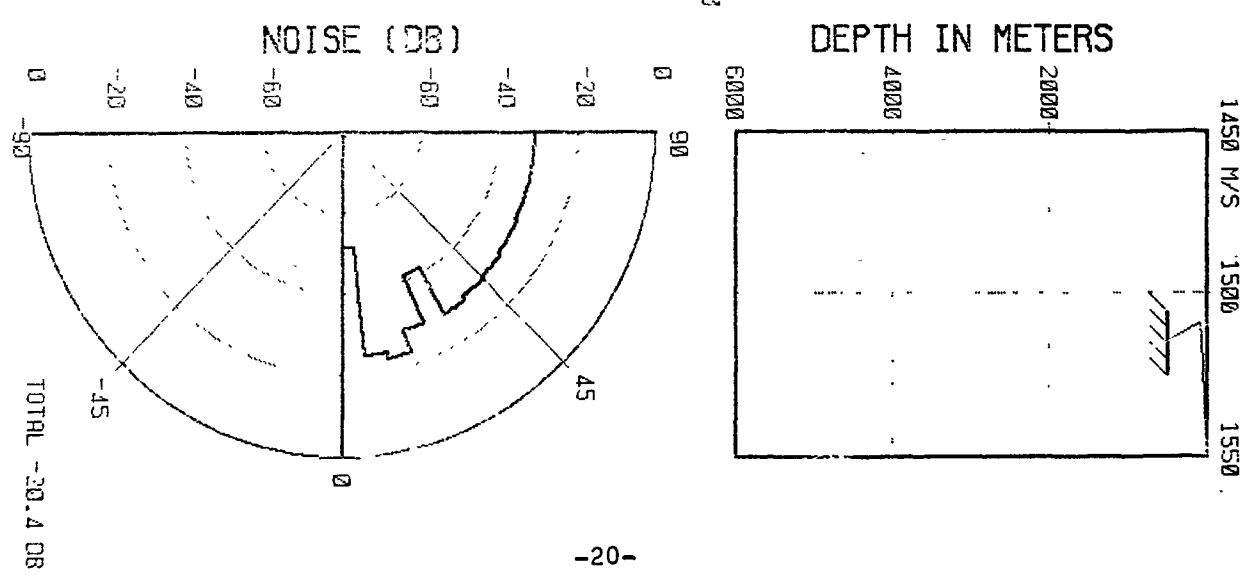
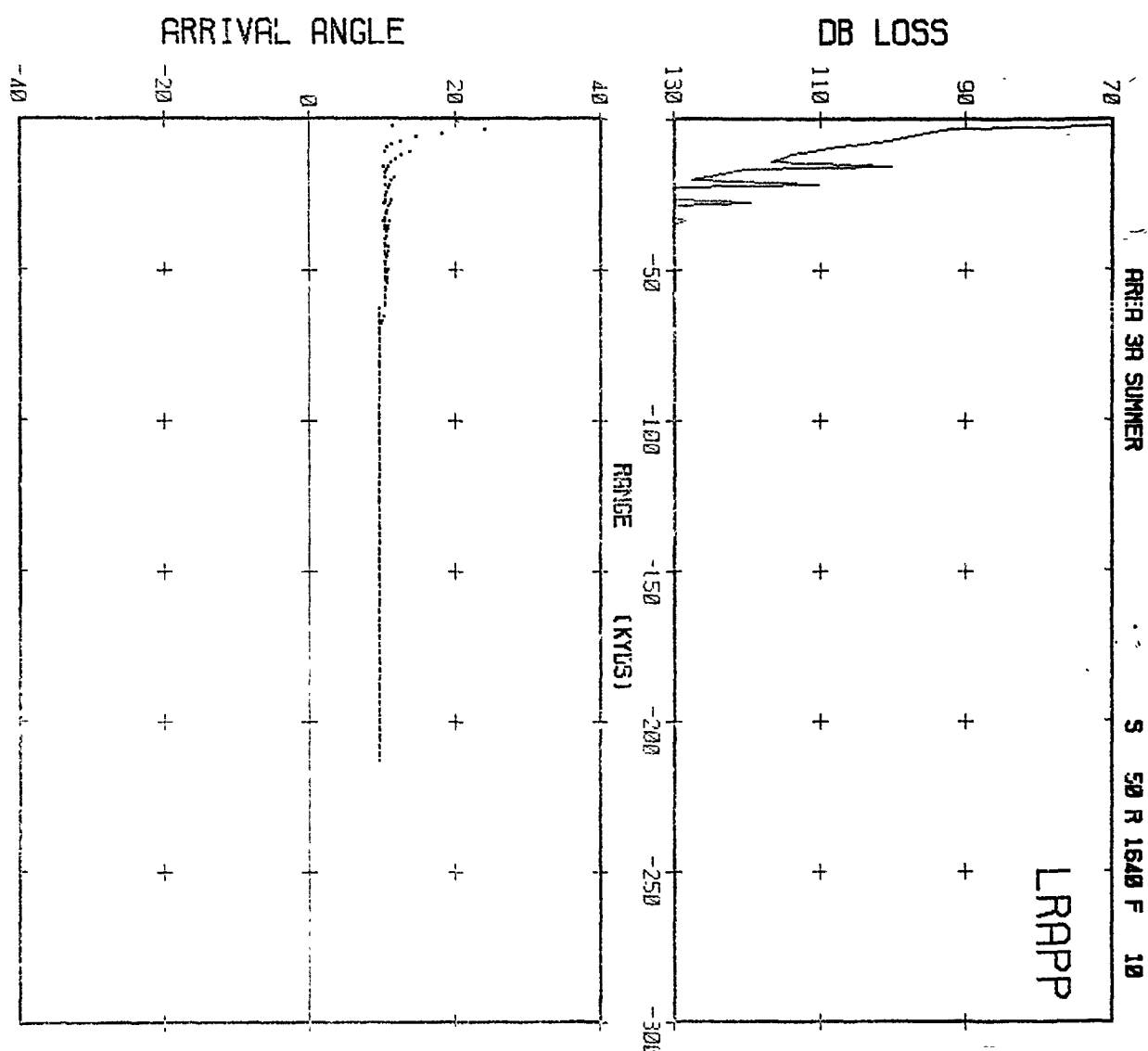
DEPTH IN METERS



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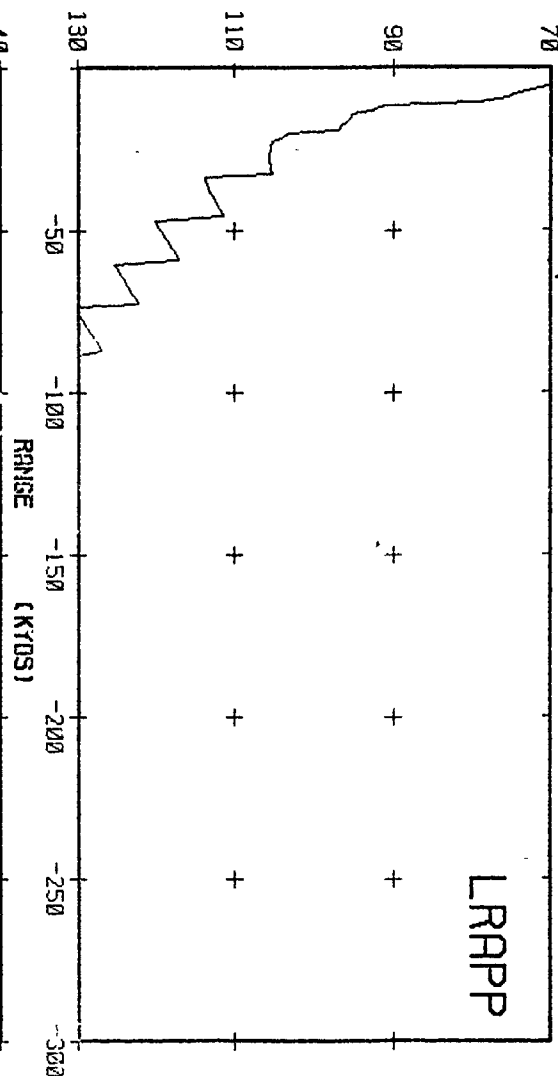


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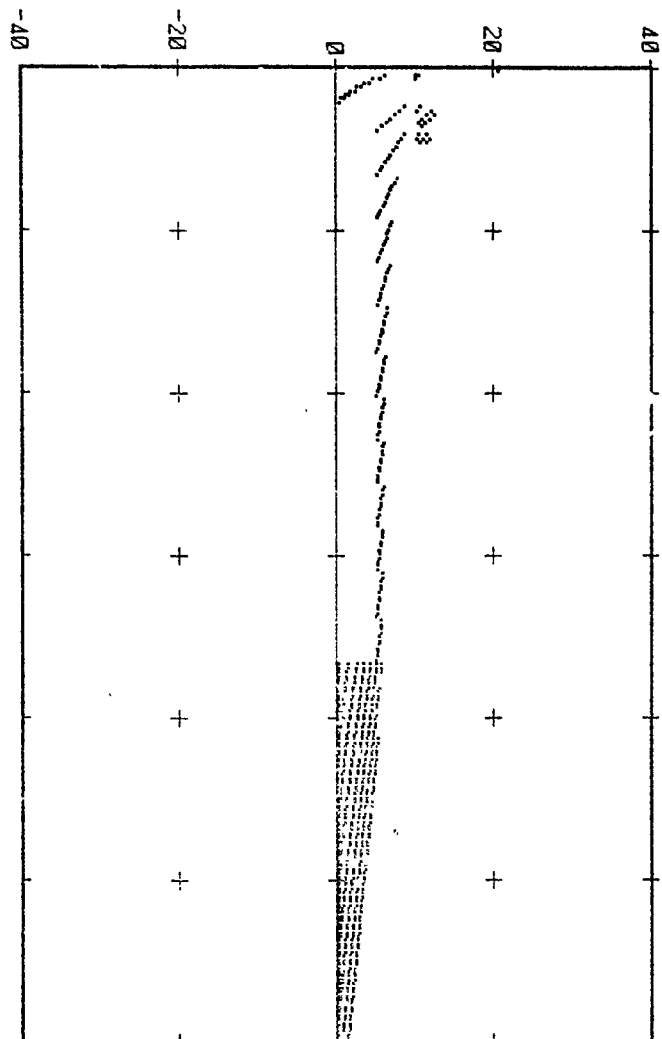
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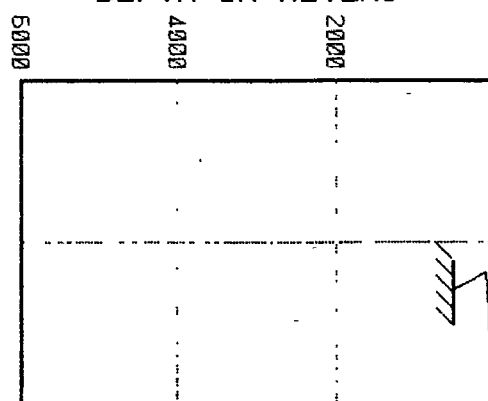
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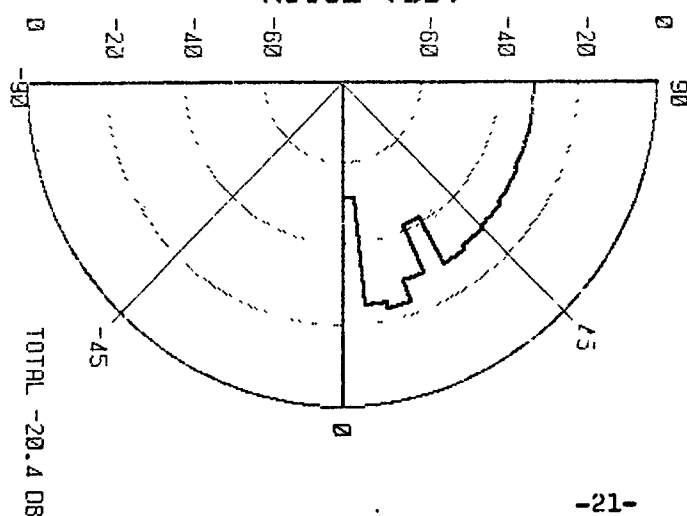
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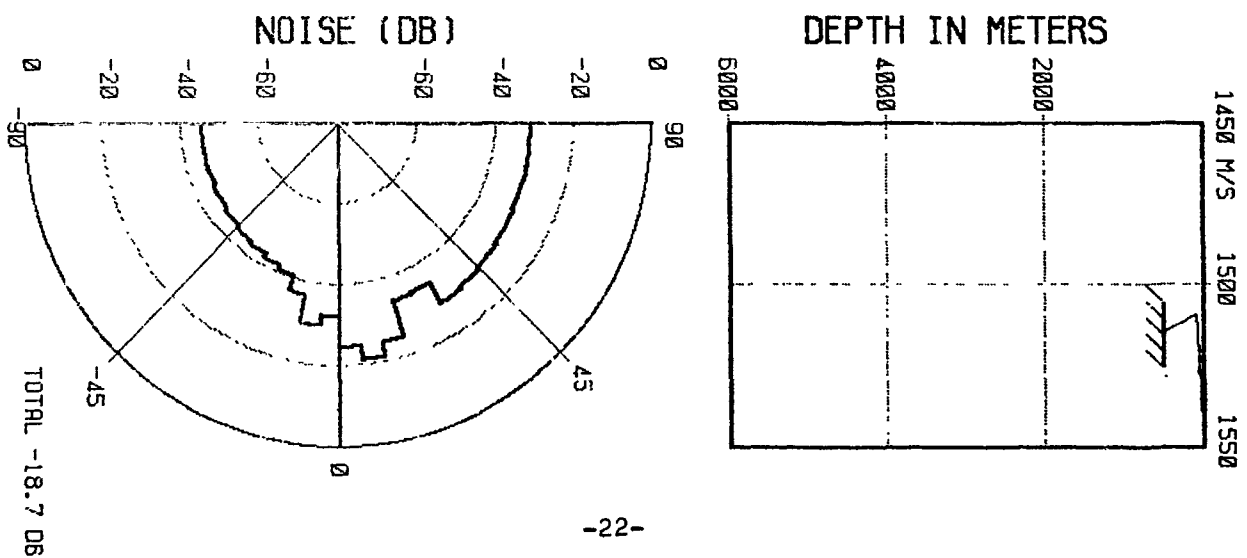
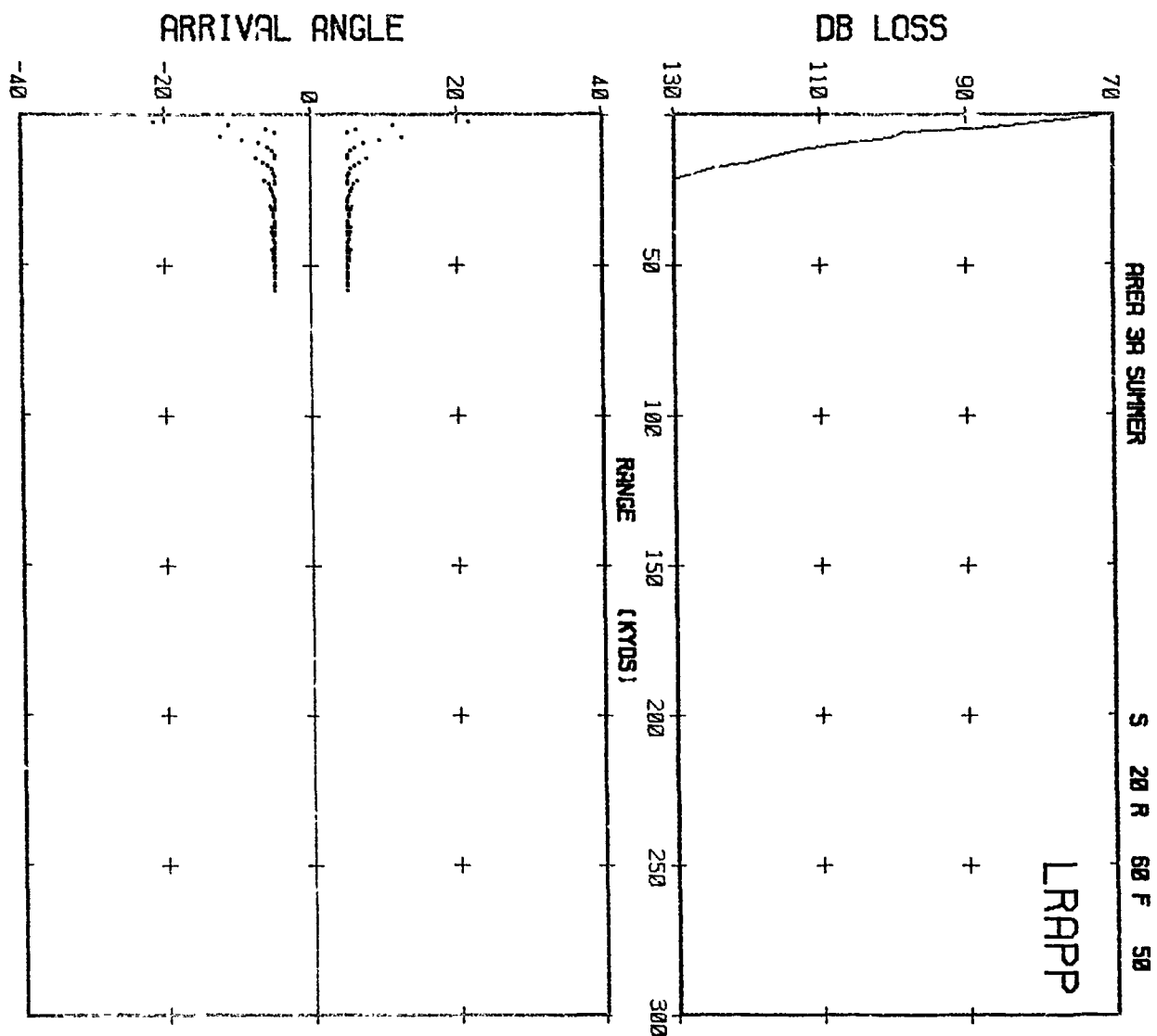


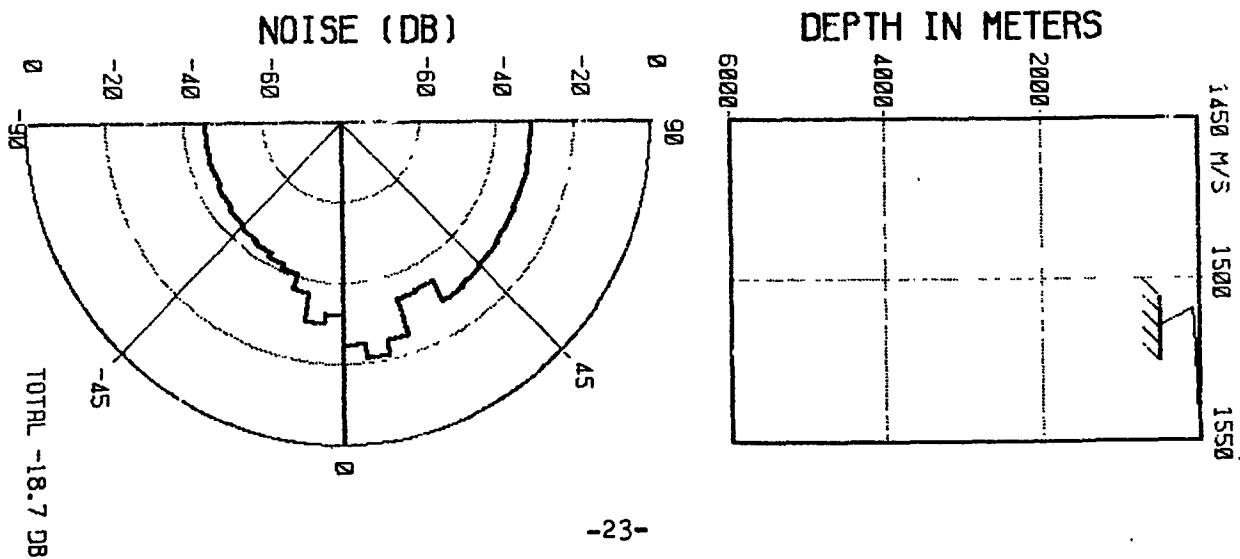
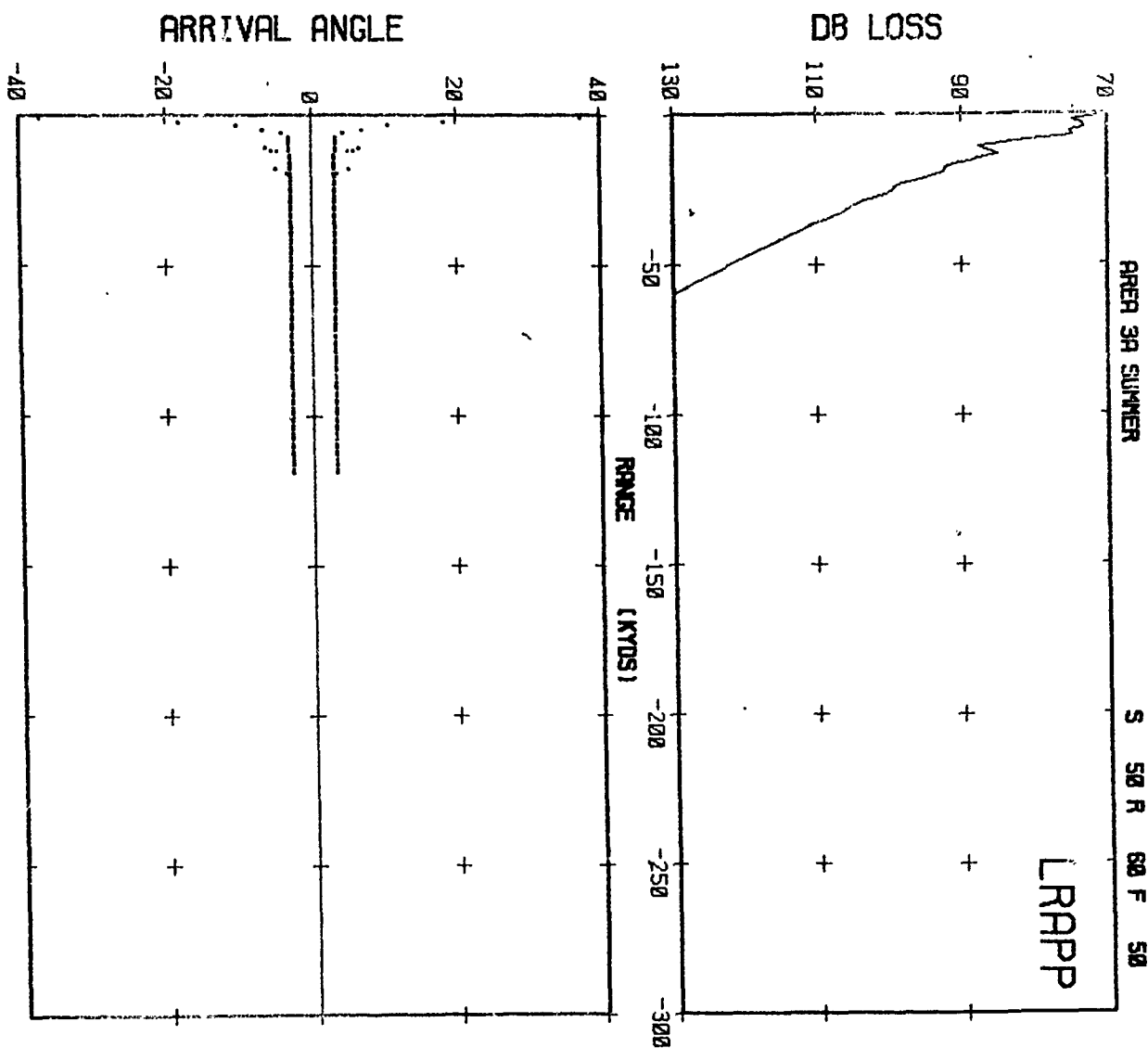
DEPTH IN METERS

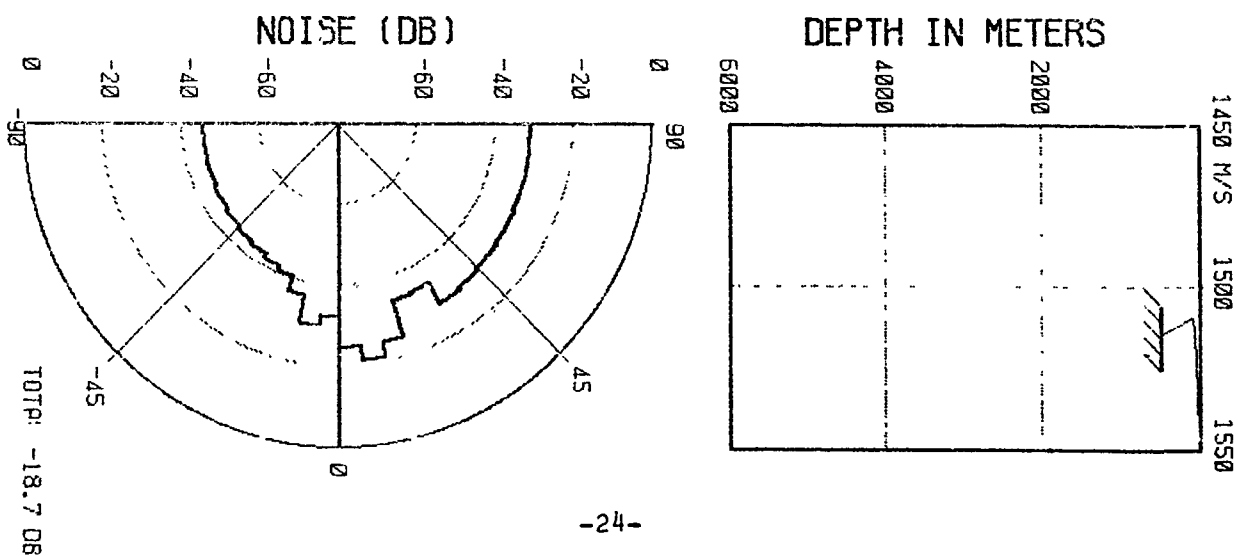
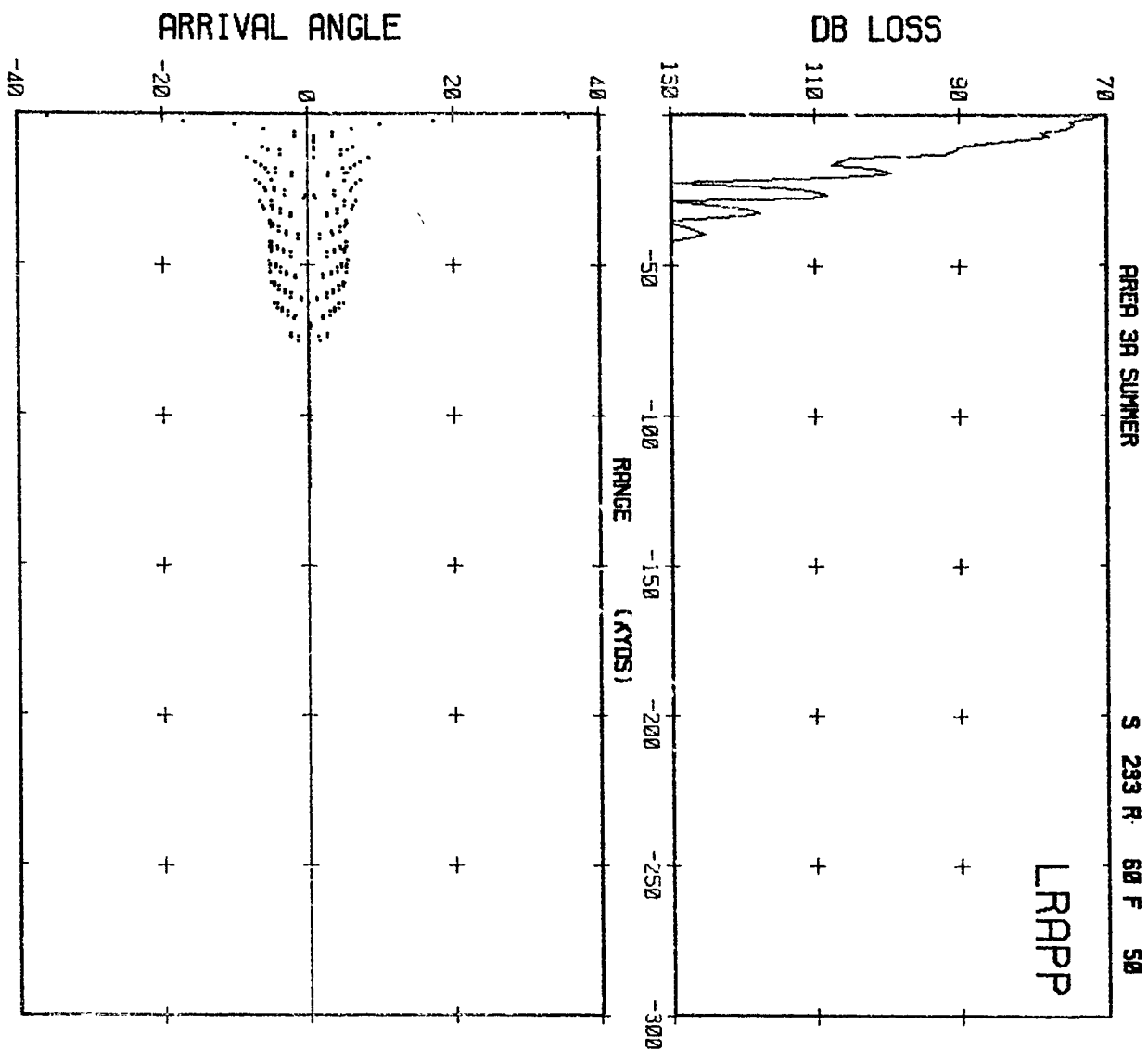


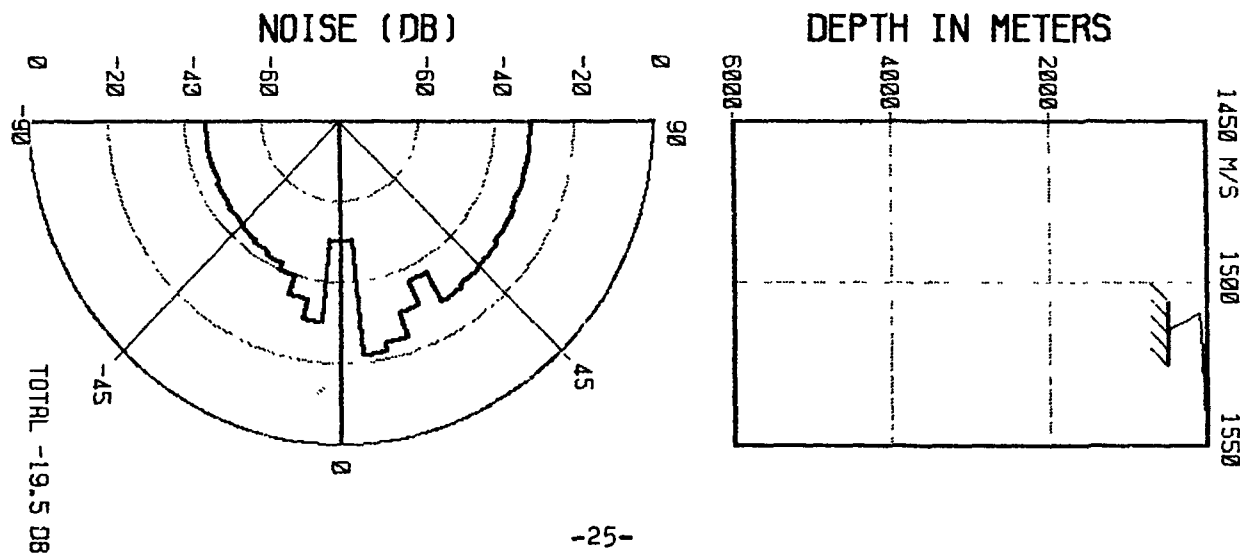
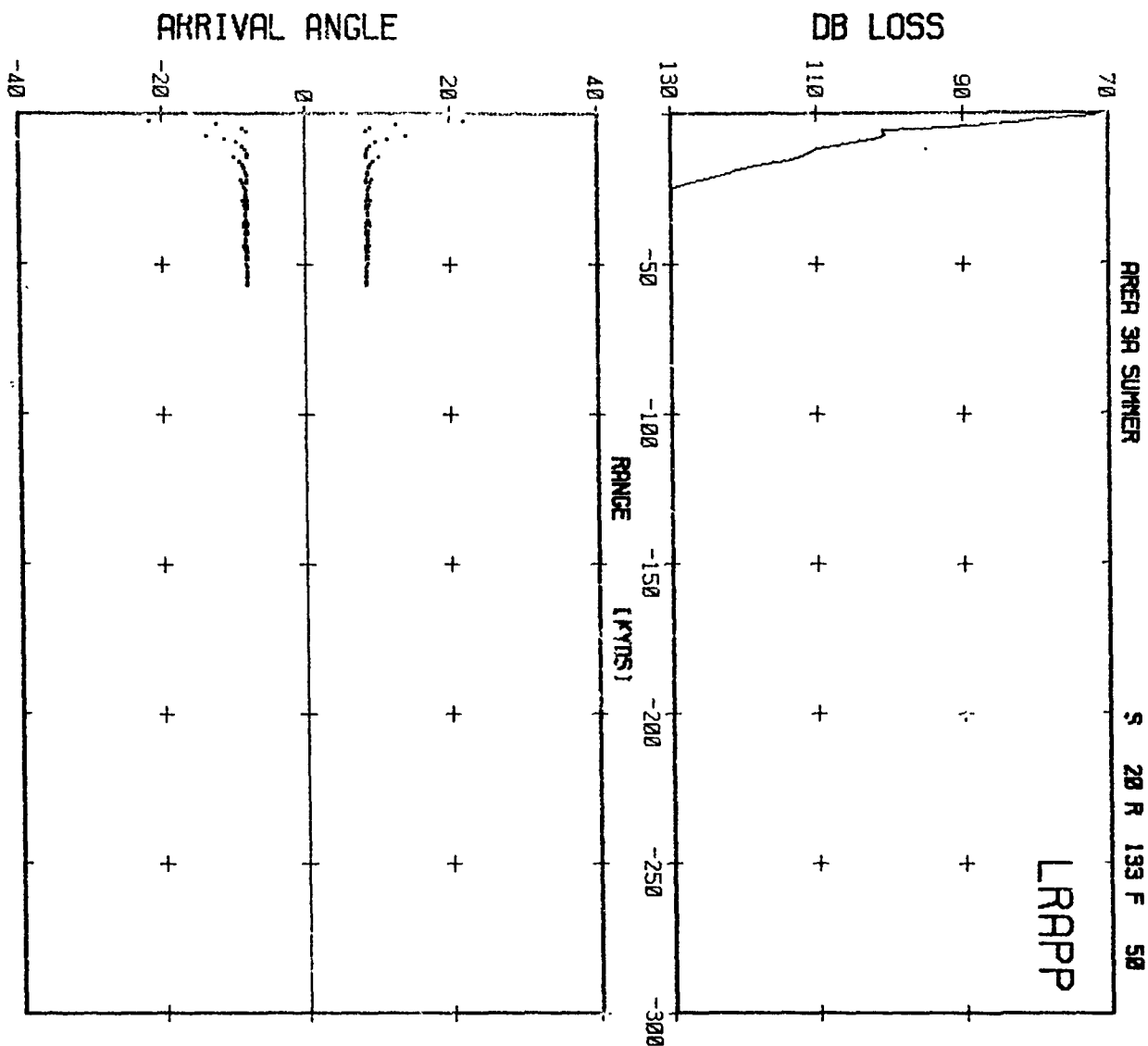
NOISE (DB)

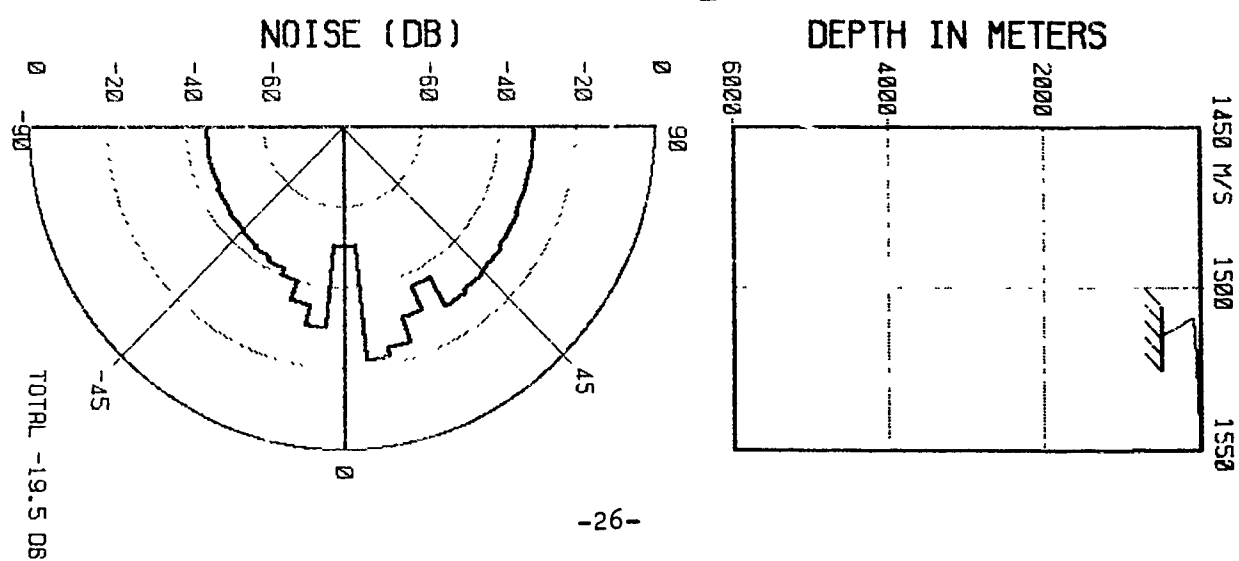
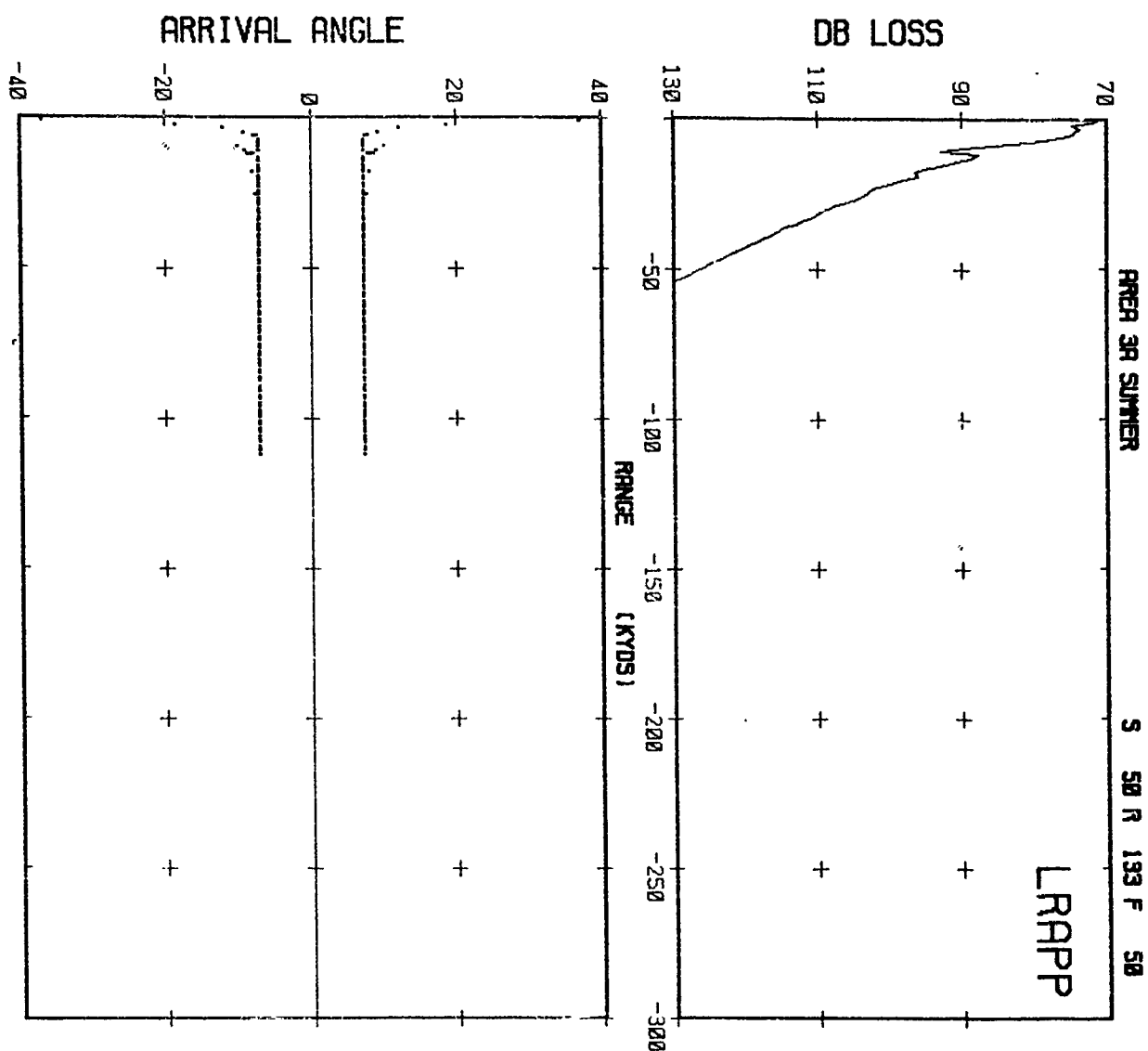










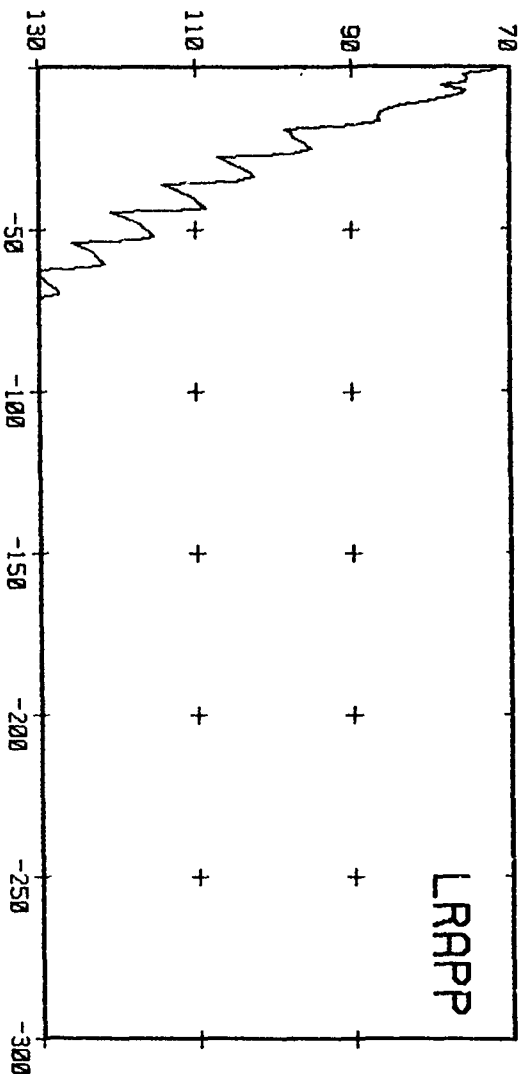


AREA 3A SUMMER

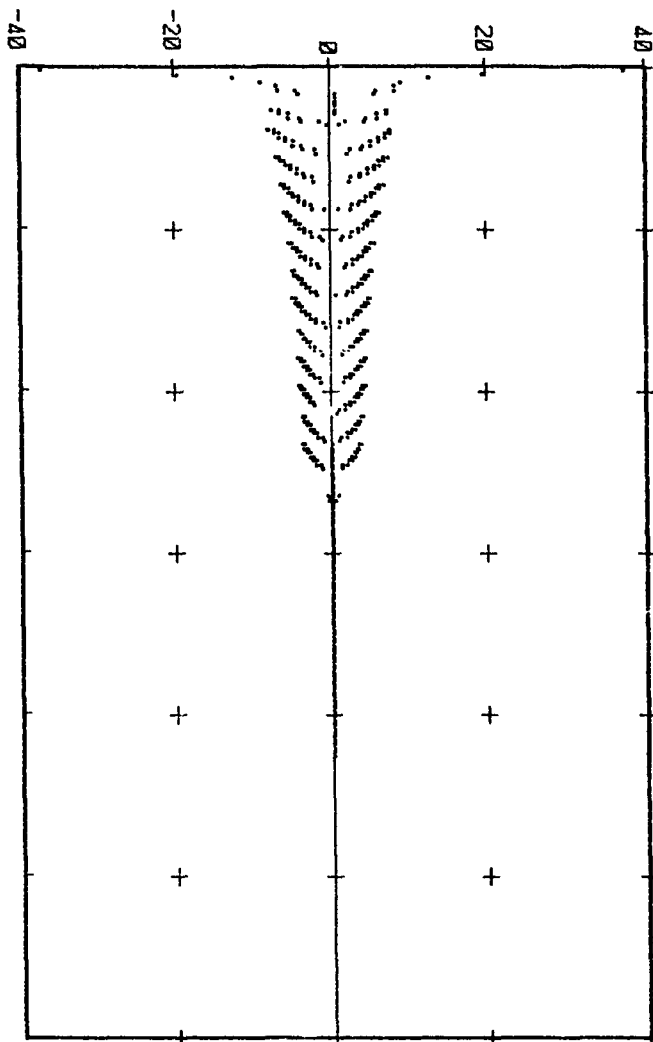
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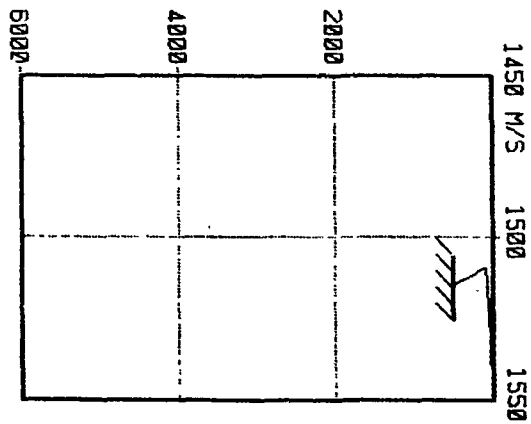
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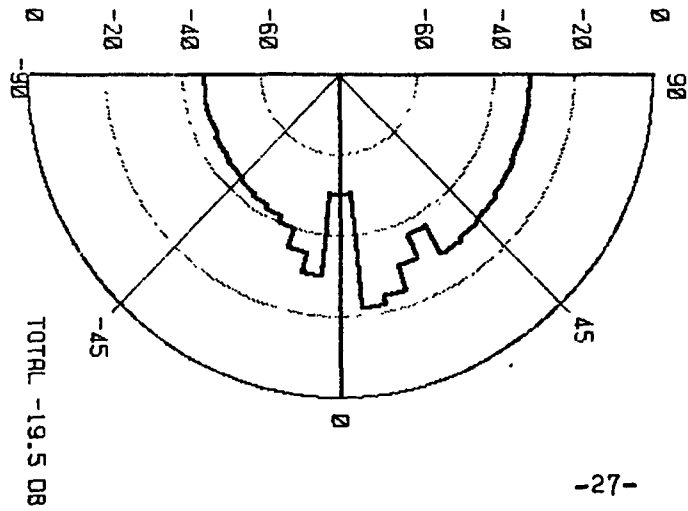
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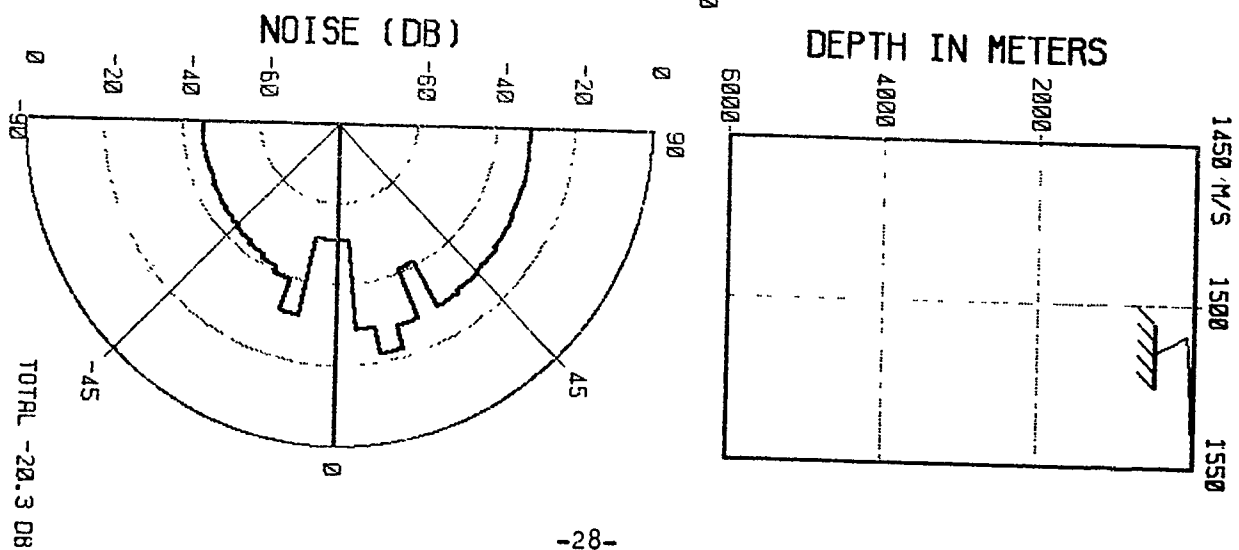
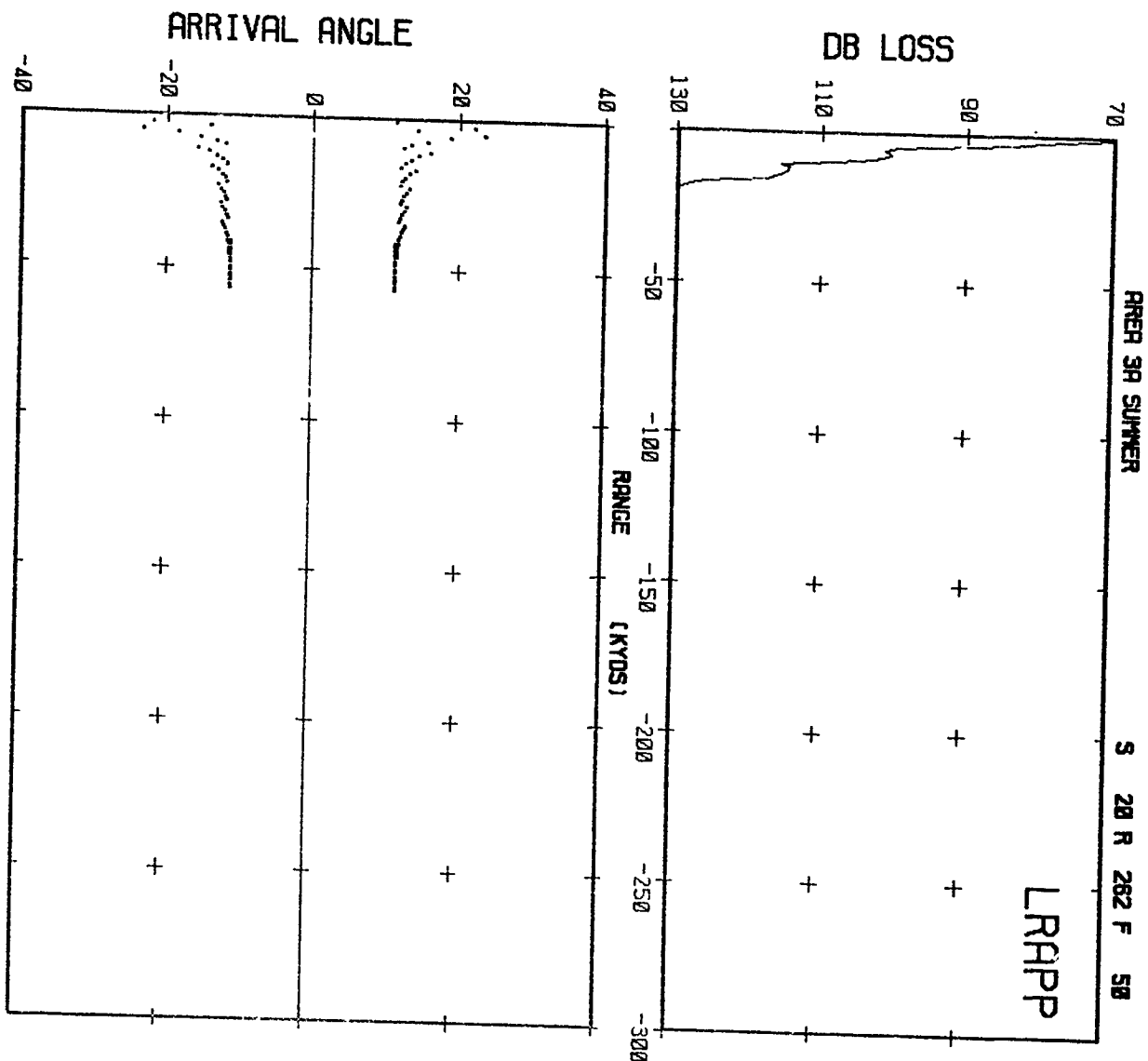


DEPTH IN METERS



NOISE (DB)



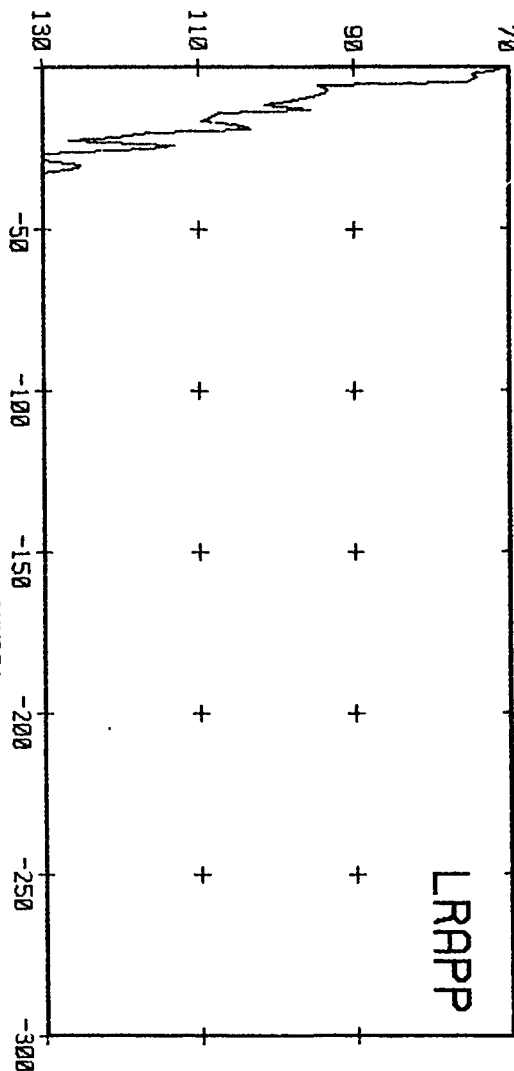


ARRER 3H SUMMER

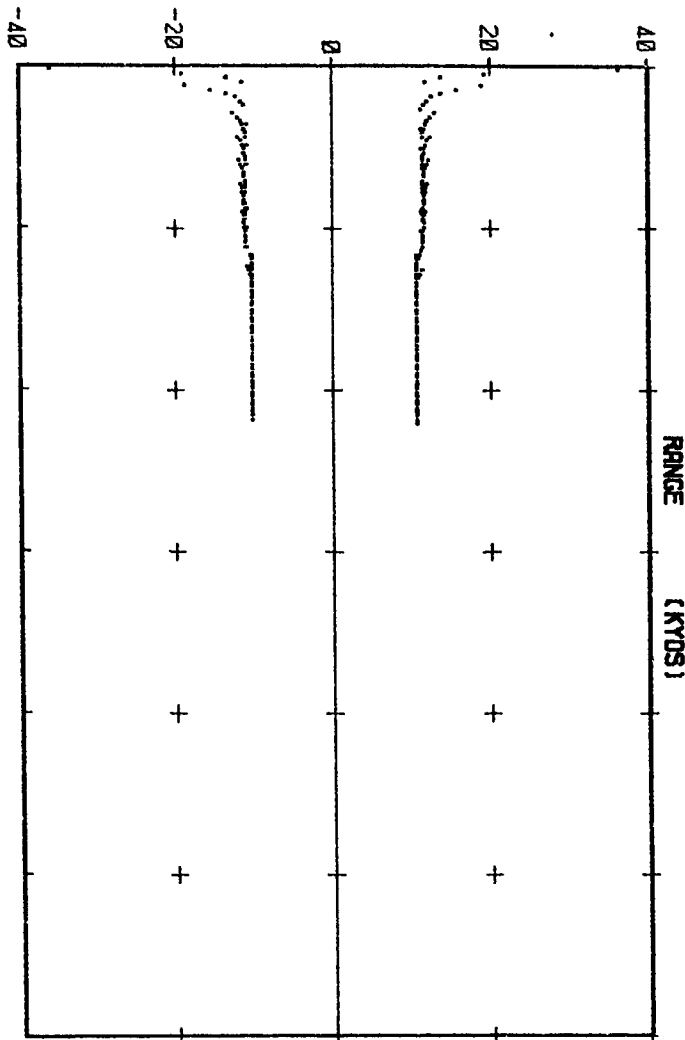
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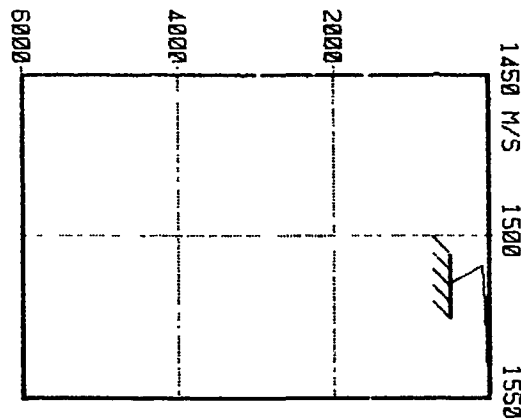
DB LOSS



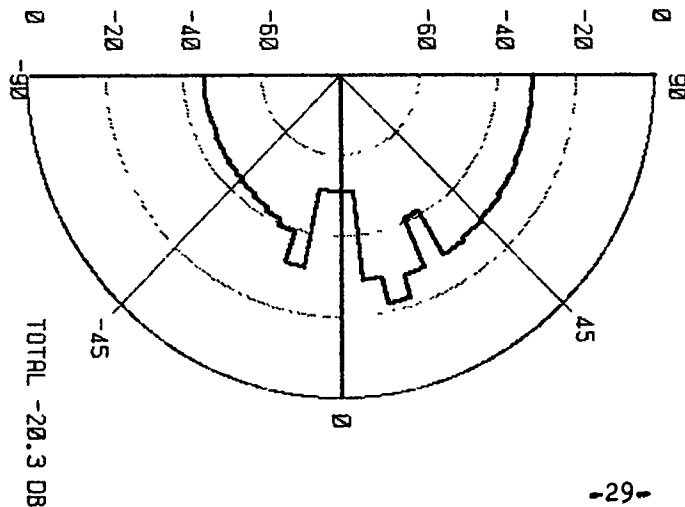
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

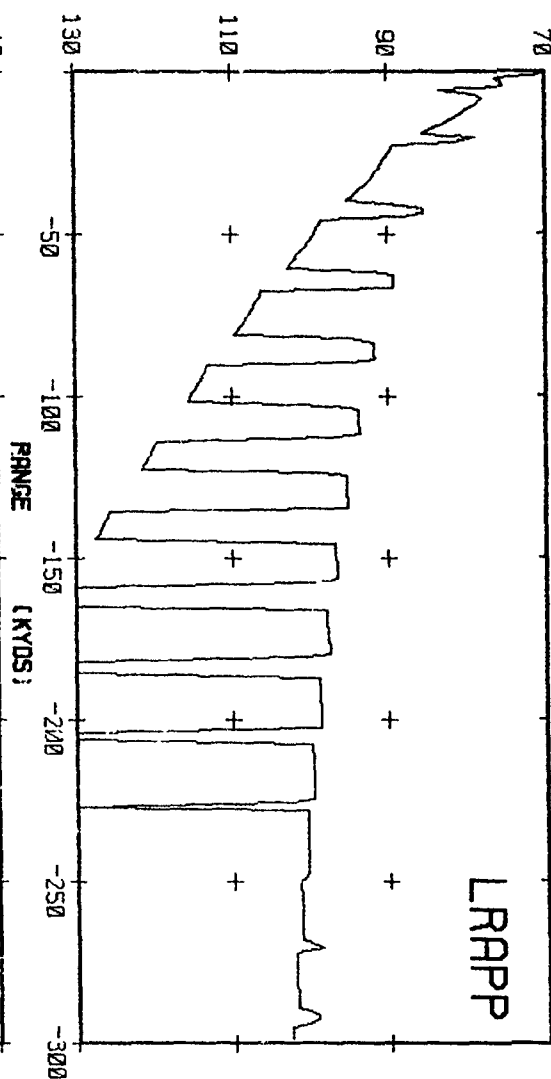


AREA 3A SUMMER

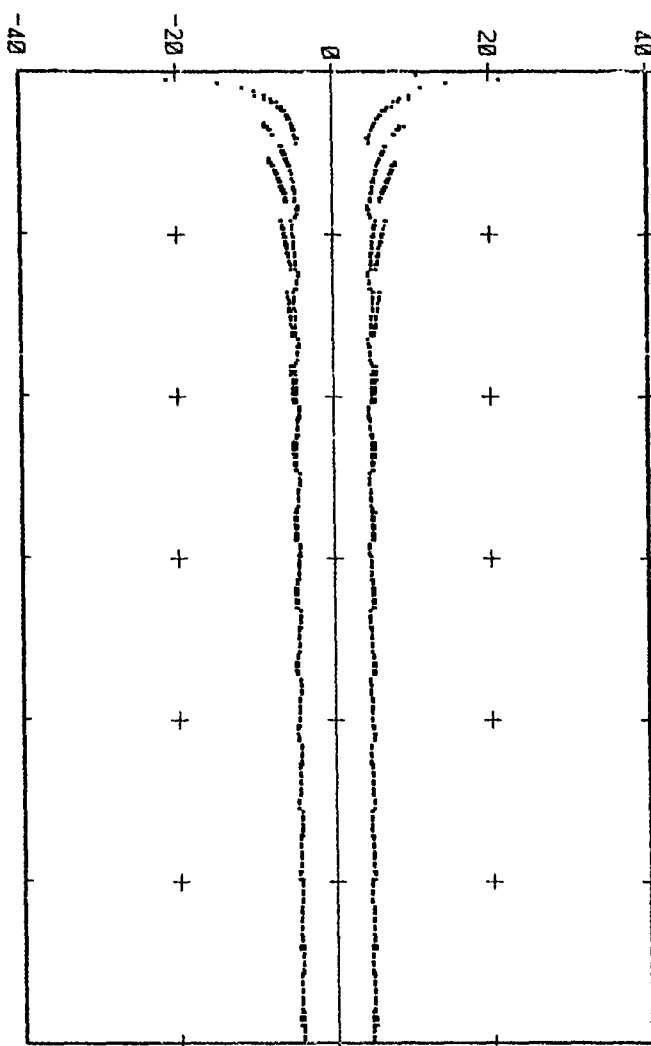
S 233 R 262 F 50

LRAPP

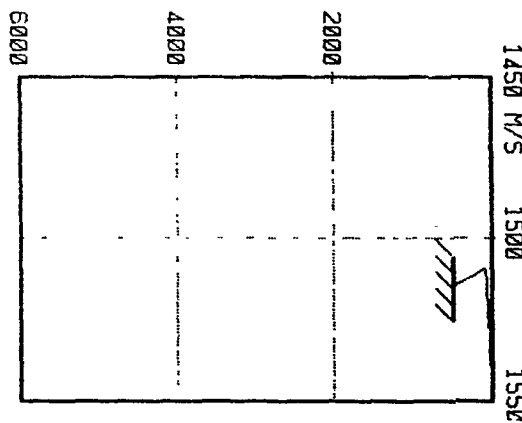
DB LOSS



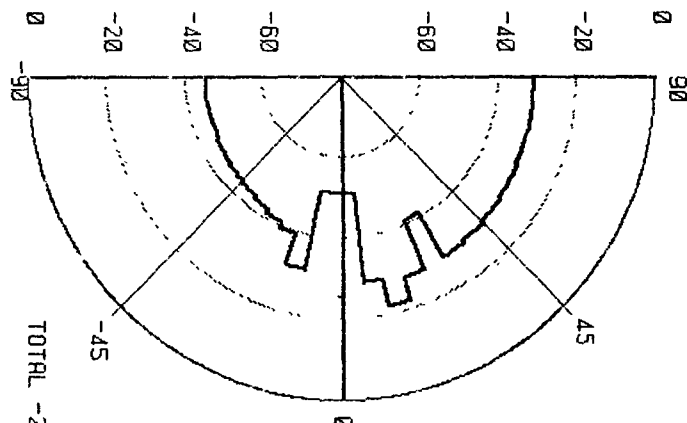
ARRIVAL ANGLE



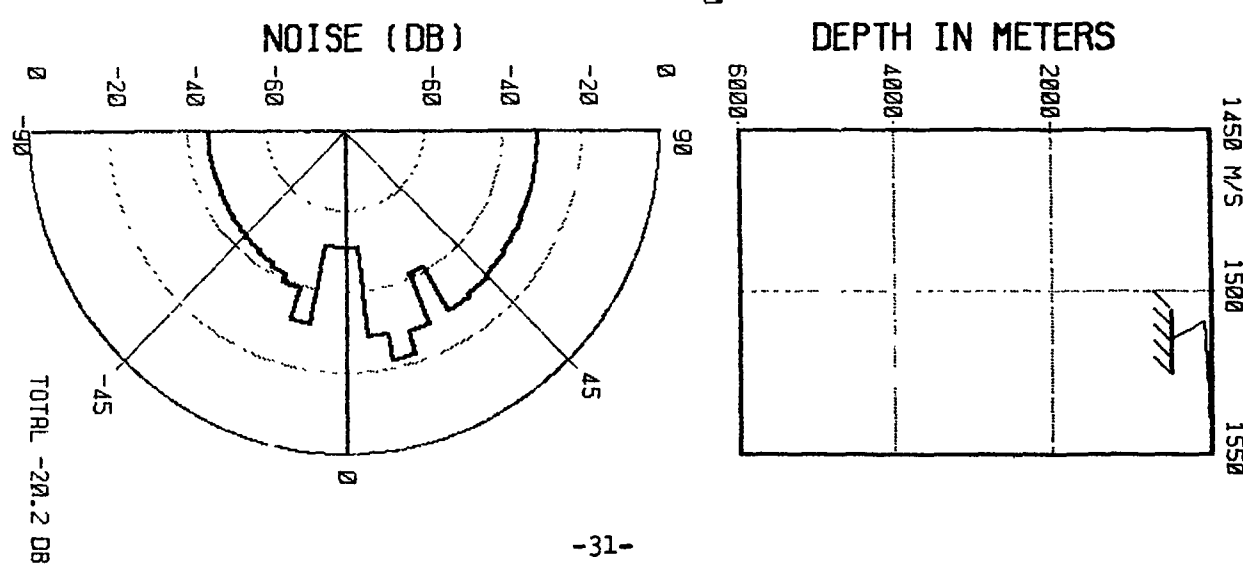
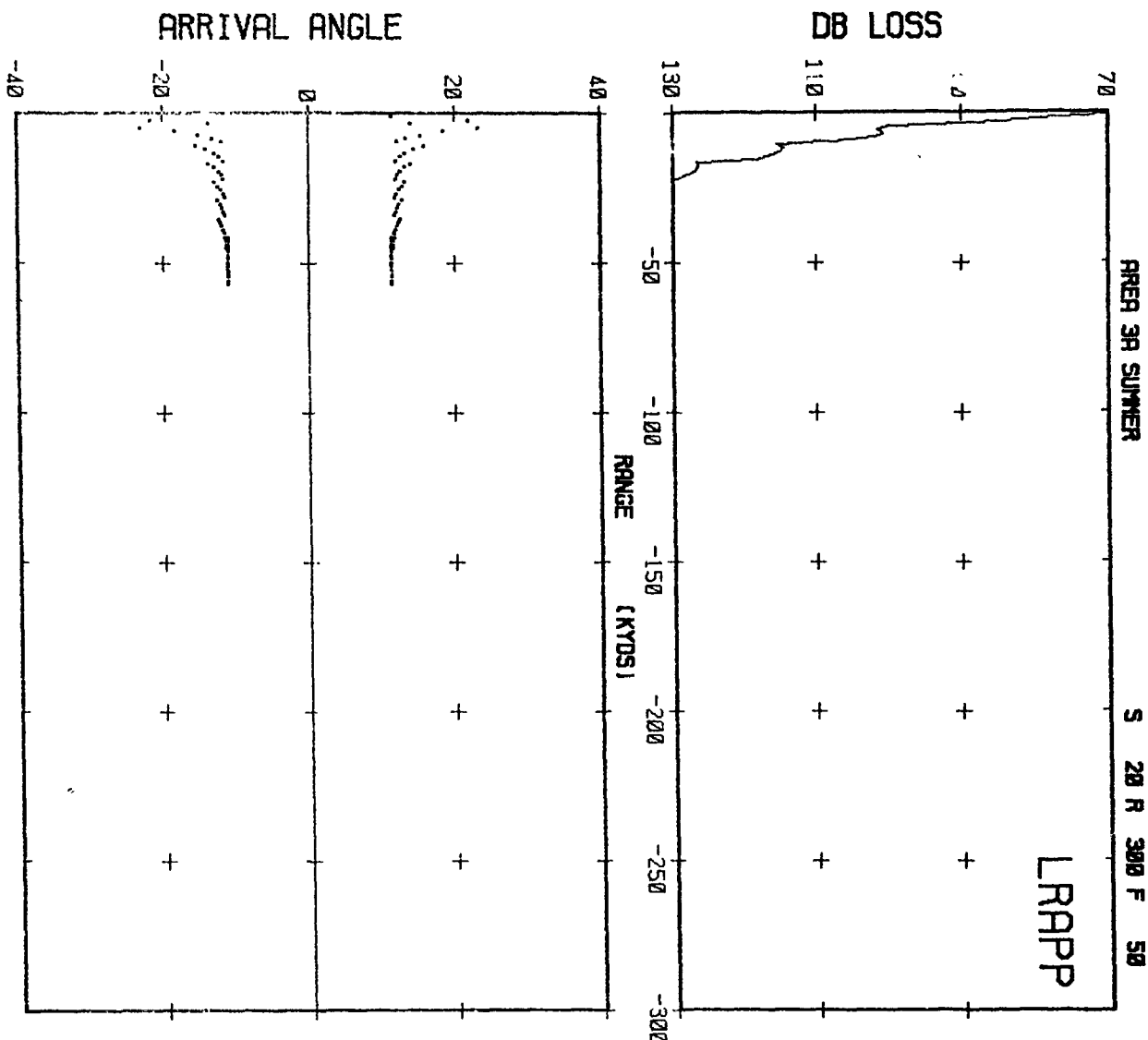
DEPTH IN METERS

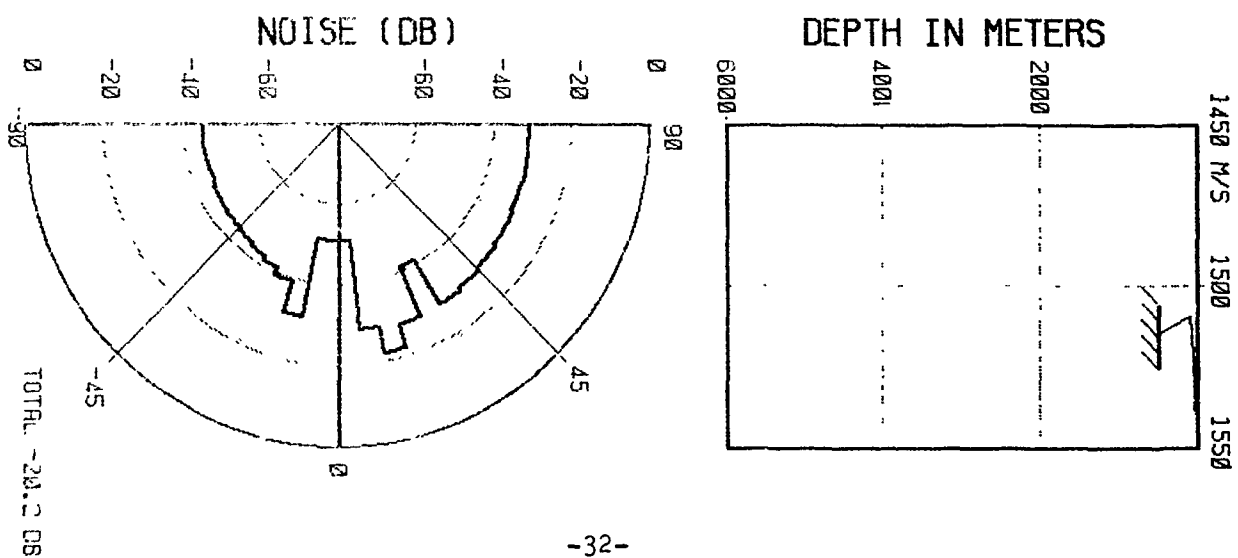
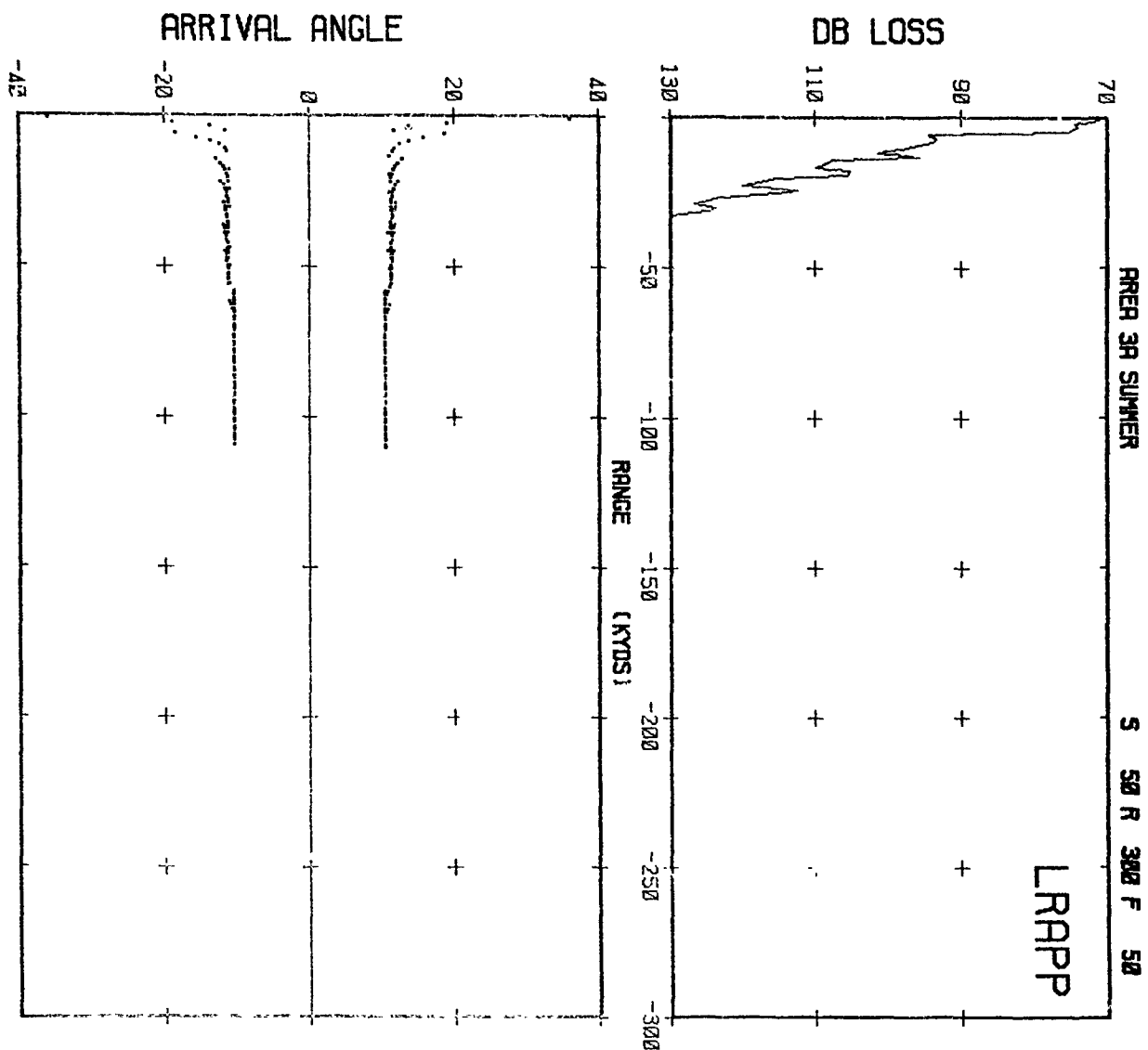


NOISE (DB)



TOTAL -20.3 DB



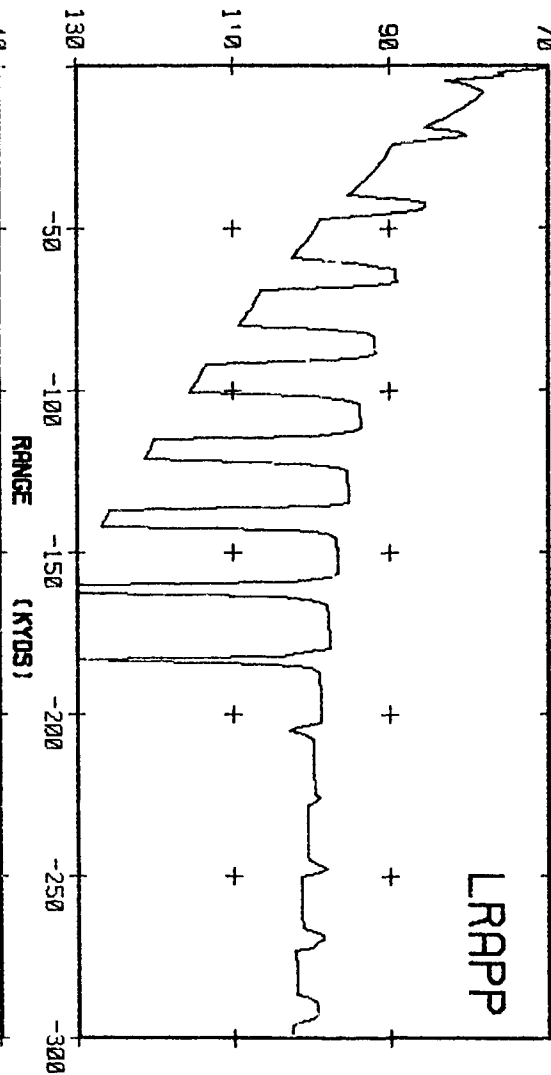


PRER 3R SUMMER

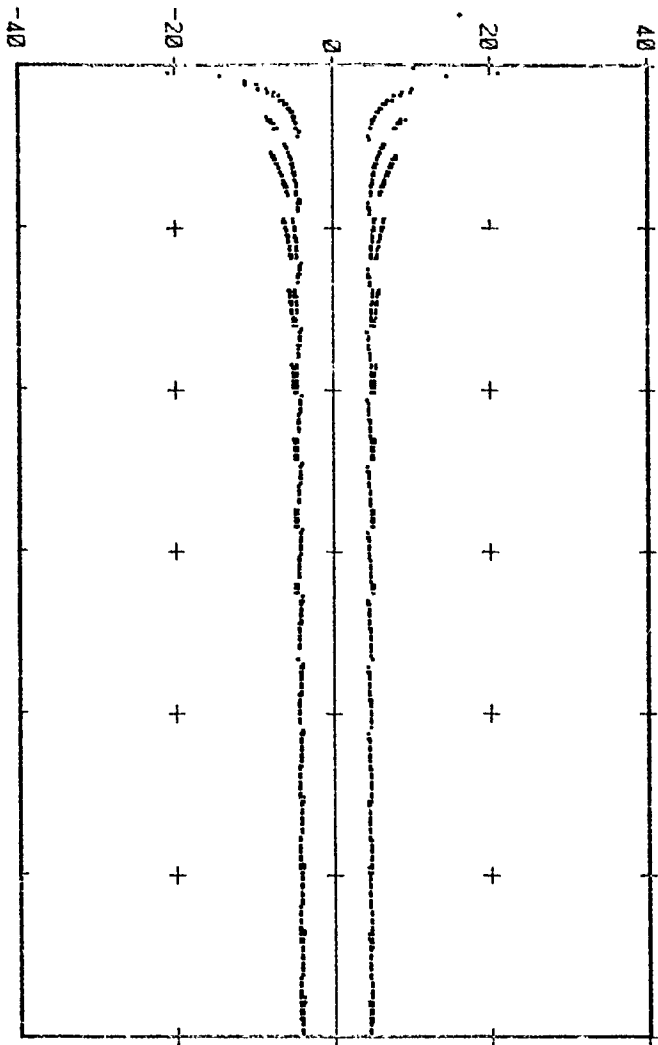
S 233 R 300 F 50

1450 M/S 1500 1550

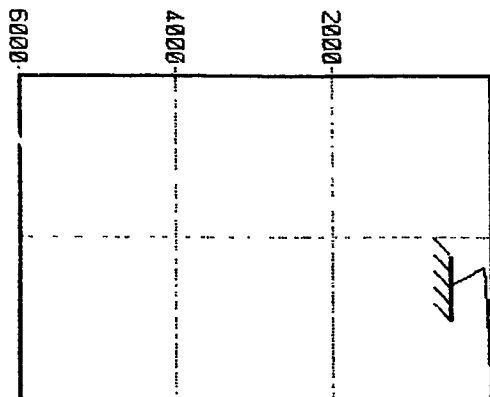
DB LOSS



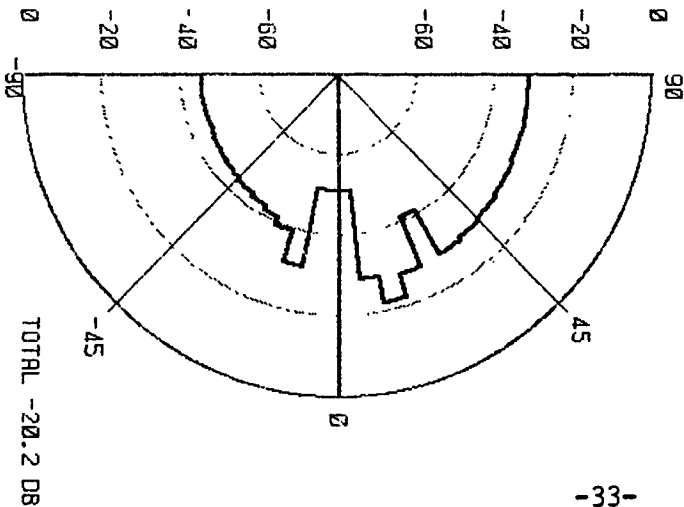
ARRIVAL ANGLE

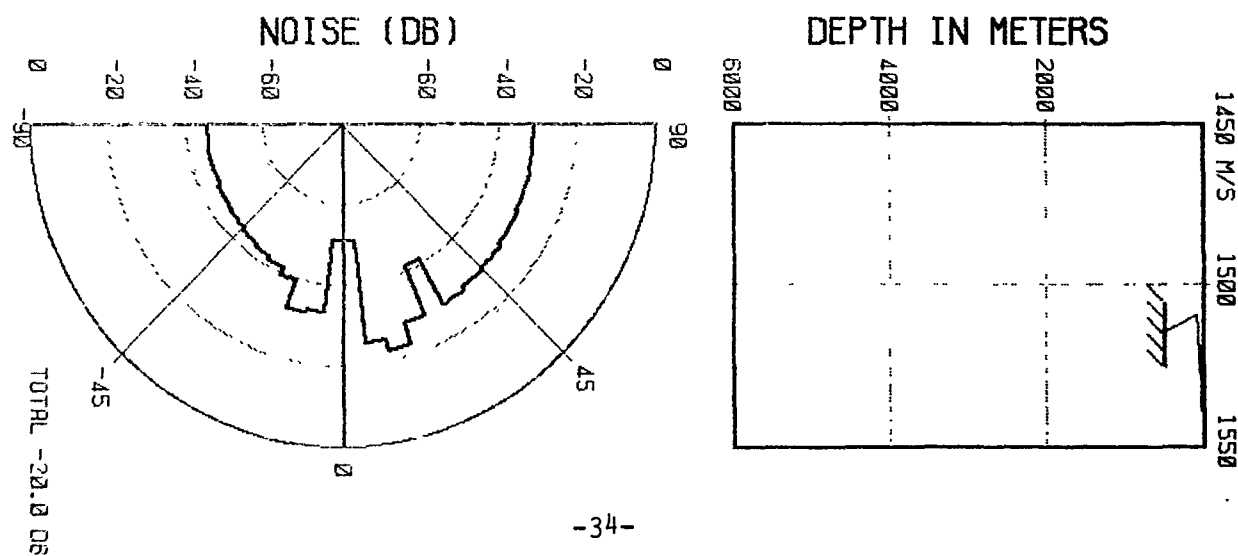
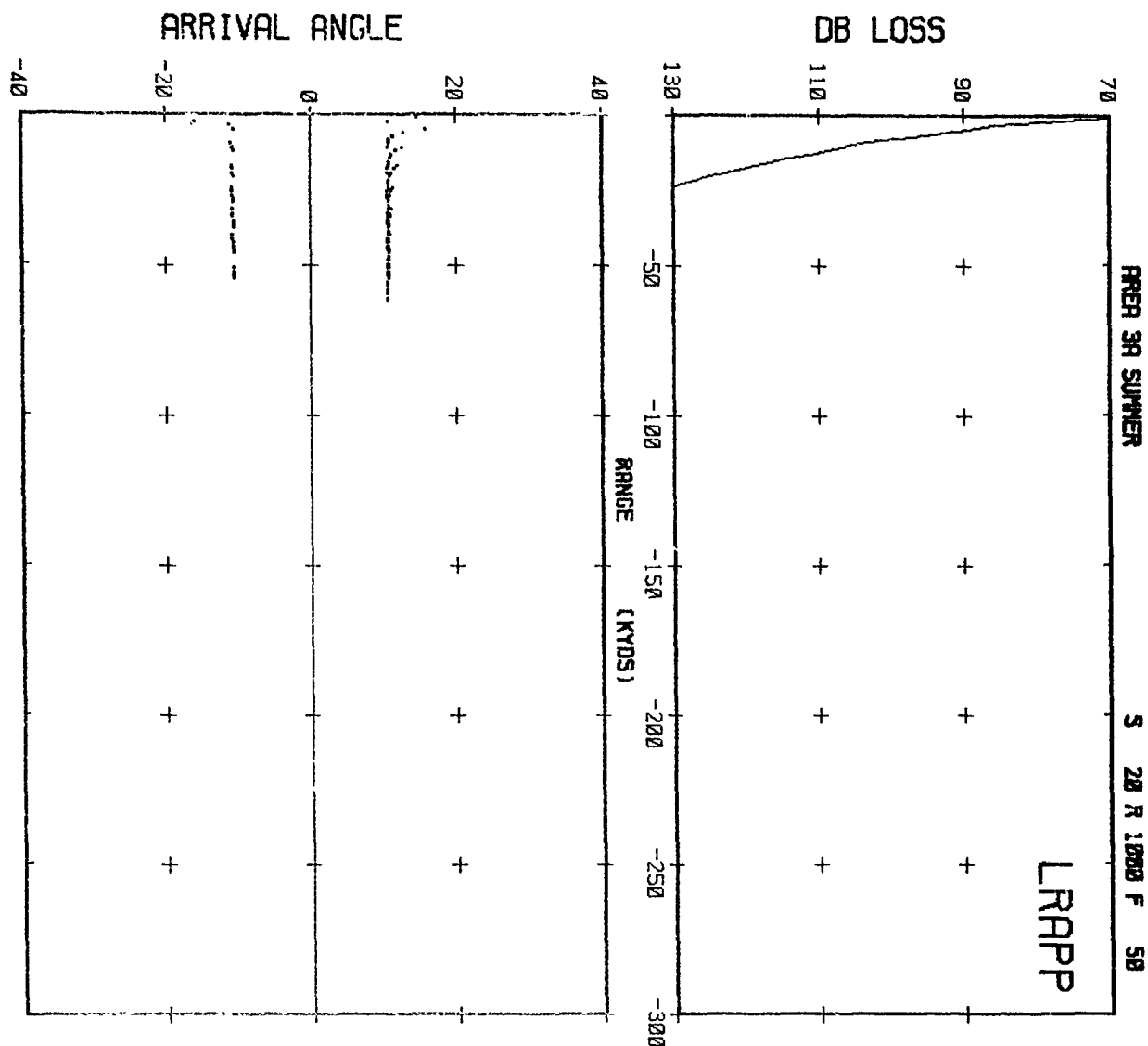


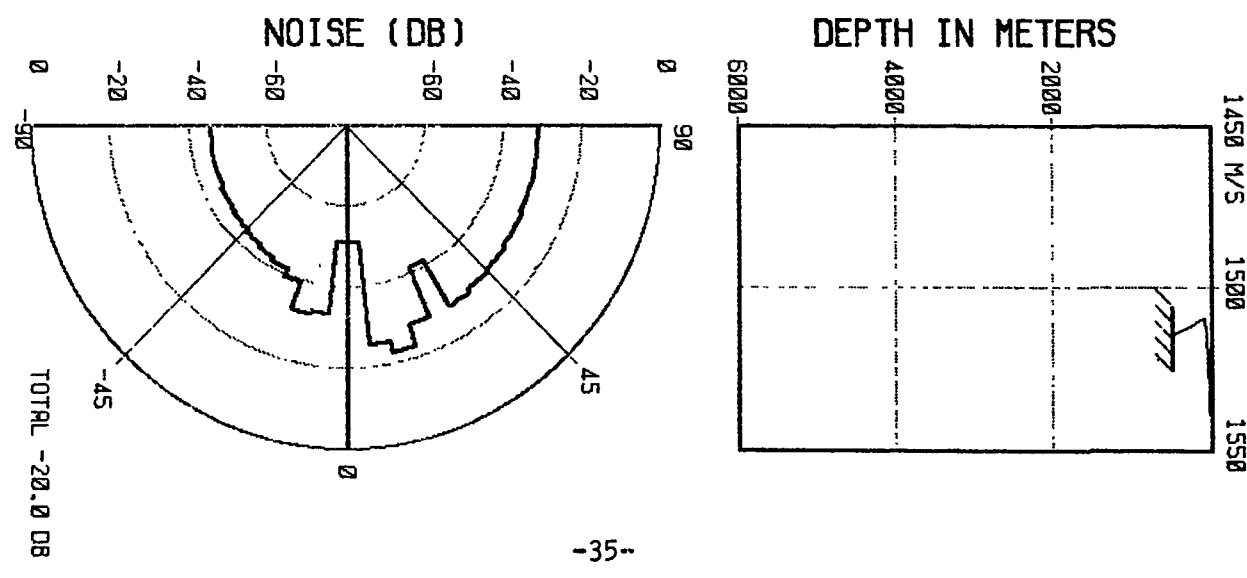
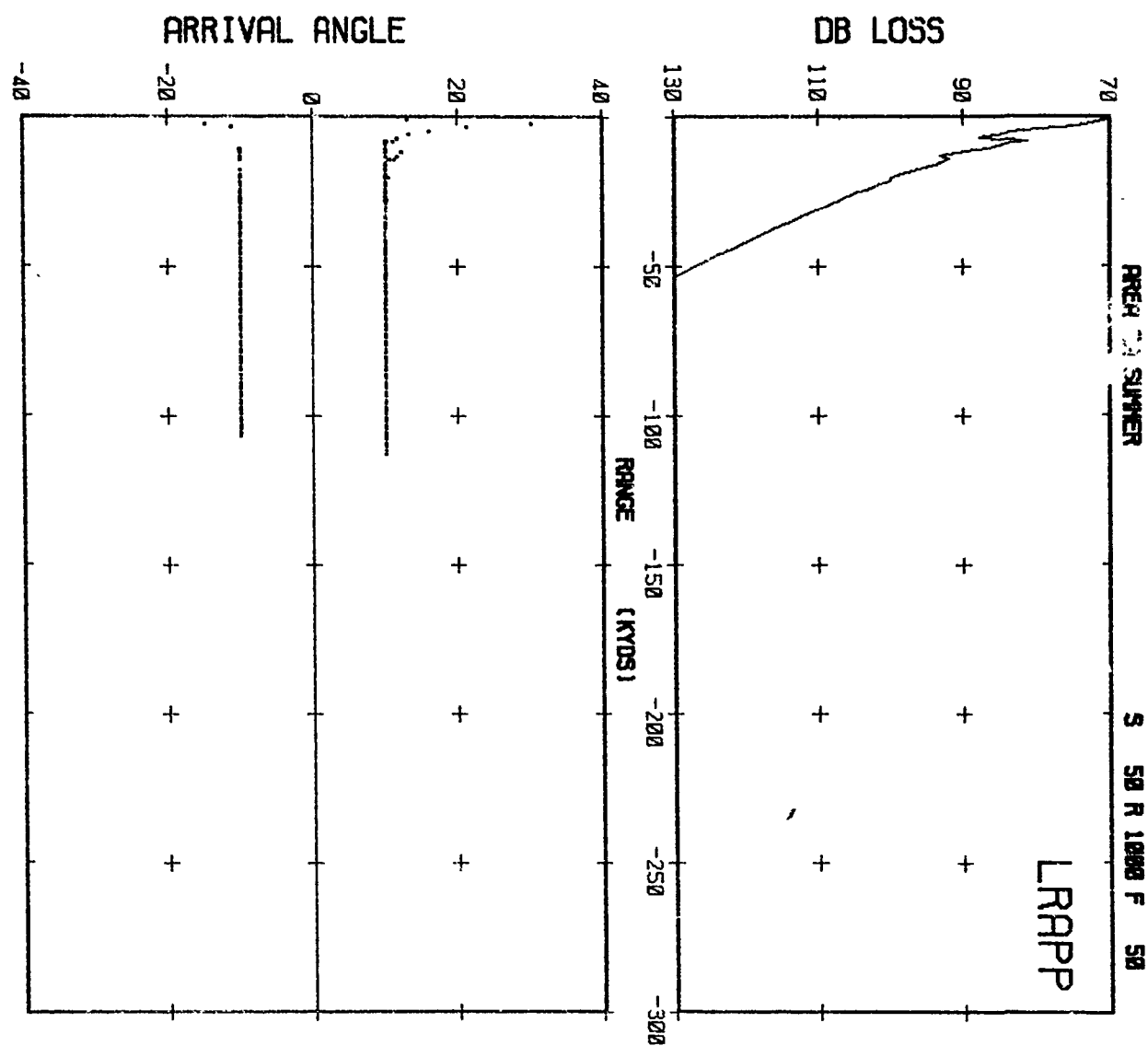
DEPTH IN METERS

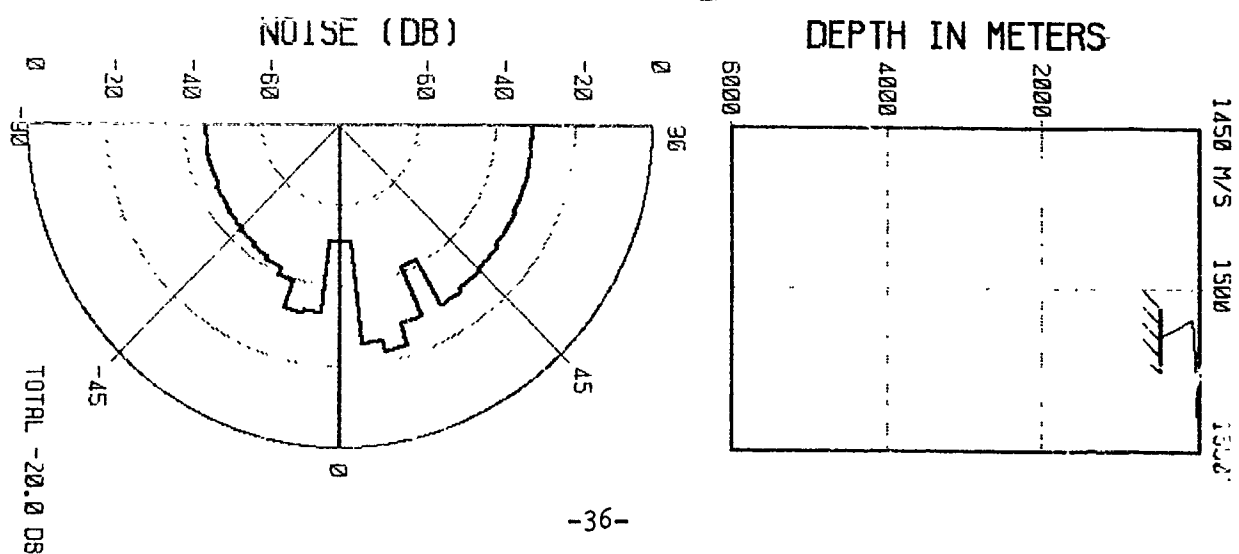
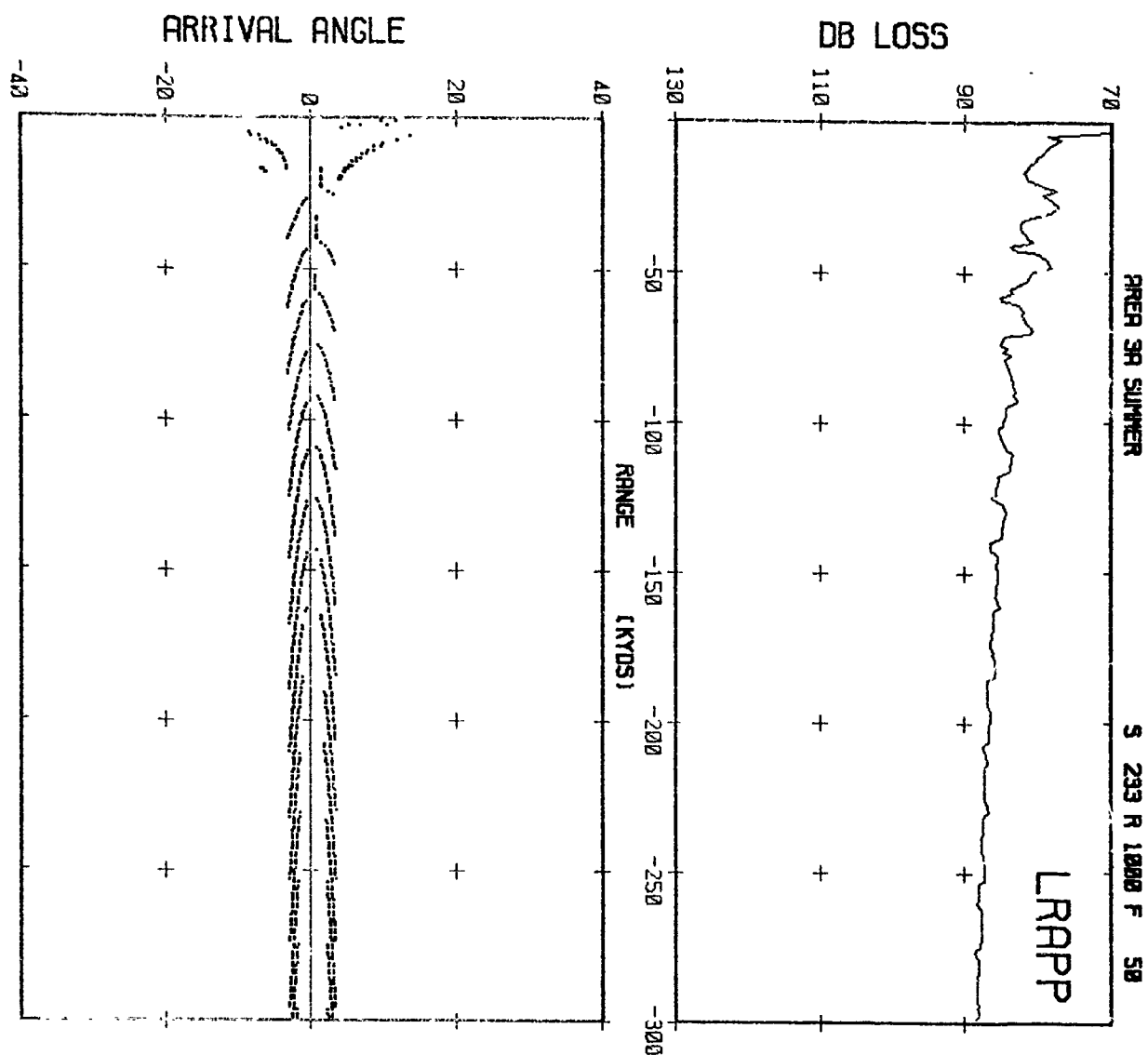


NOISE (DB)







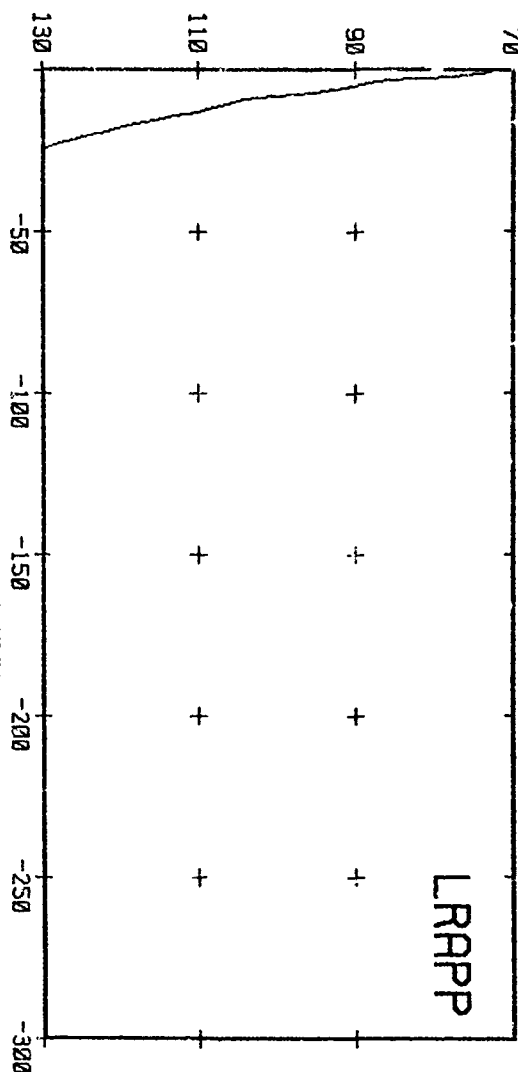


RRR 3R SUMMER

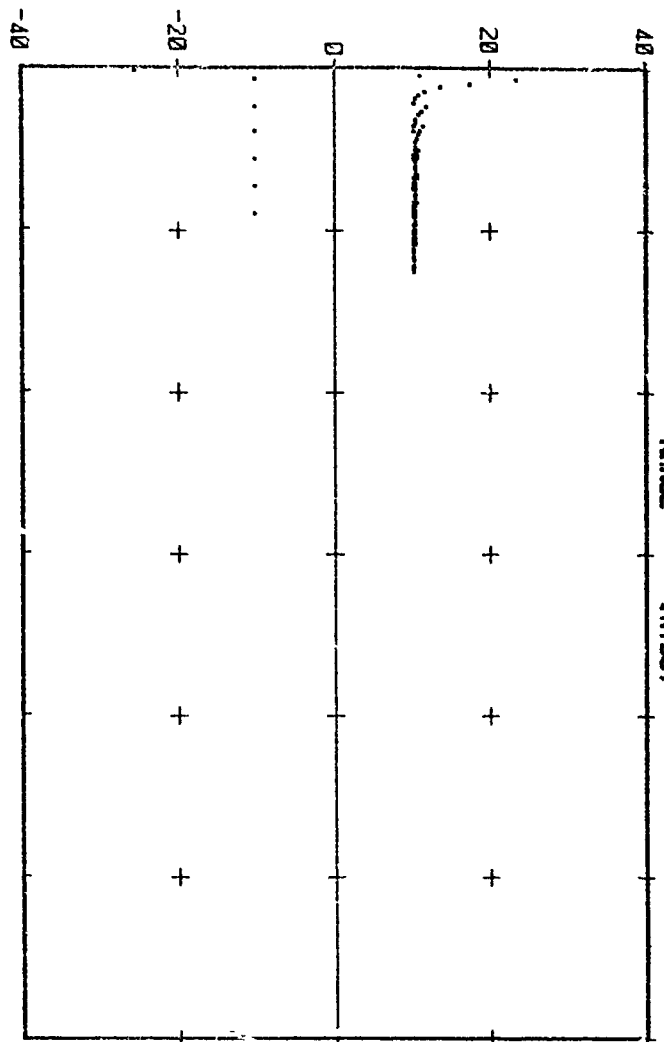
S 20 R 1500 F 50

1450 M/S 1500 1550

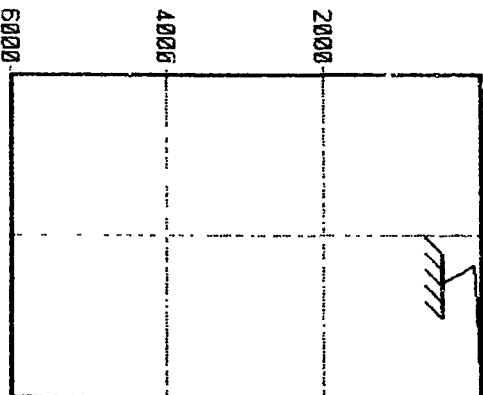
DB LOSS



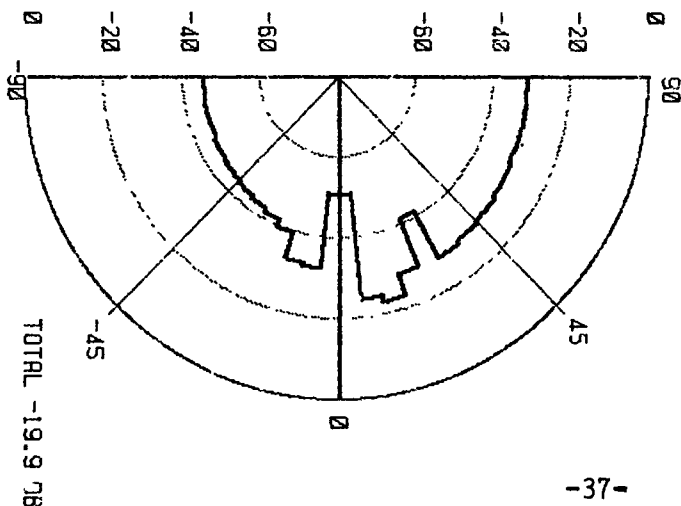
ARRIVAL ANGLE

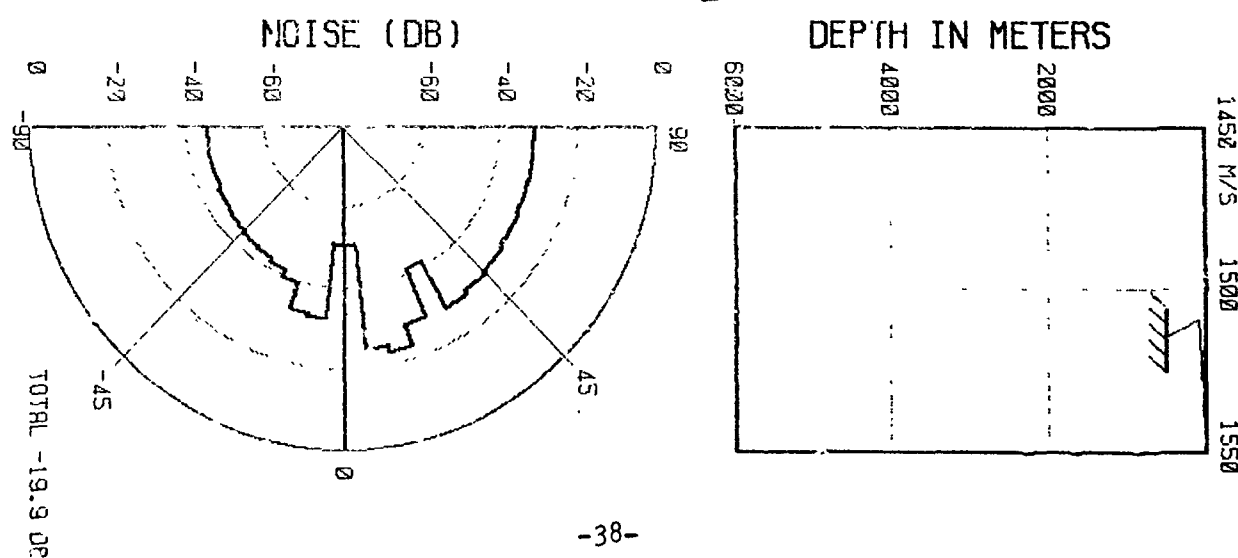
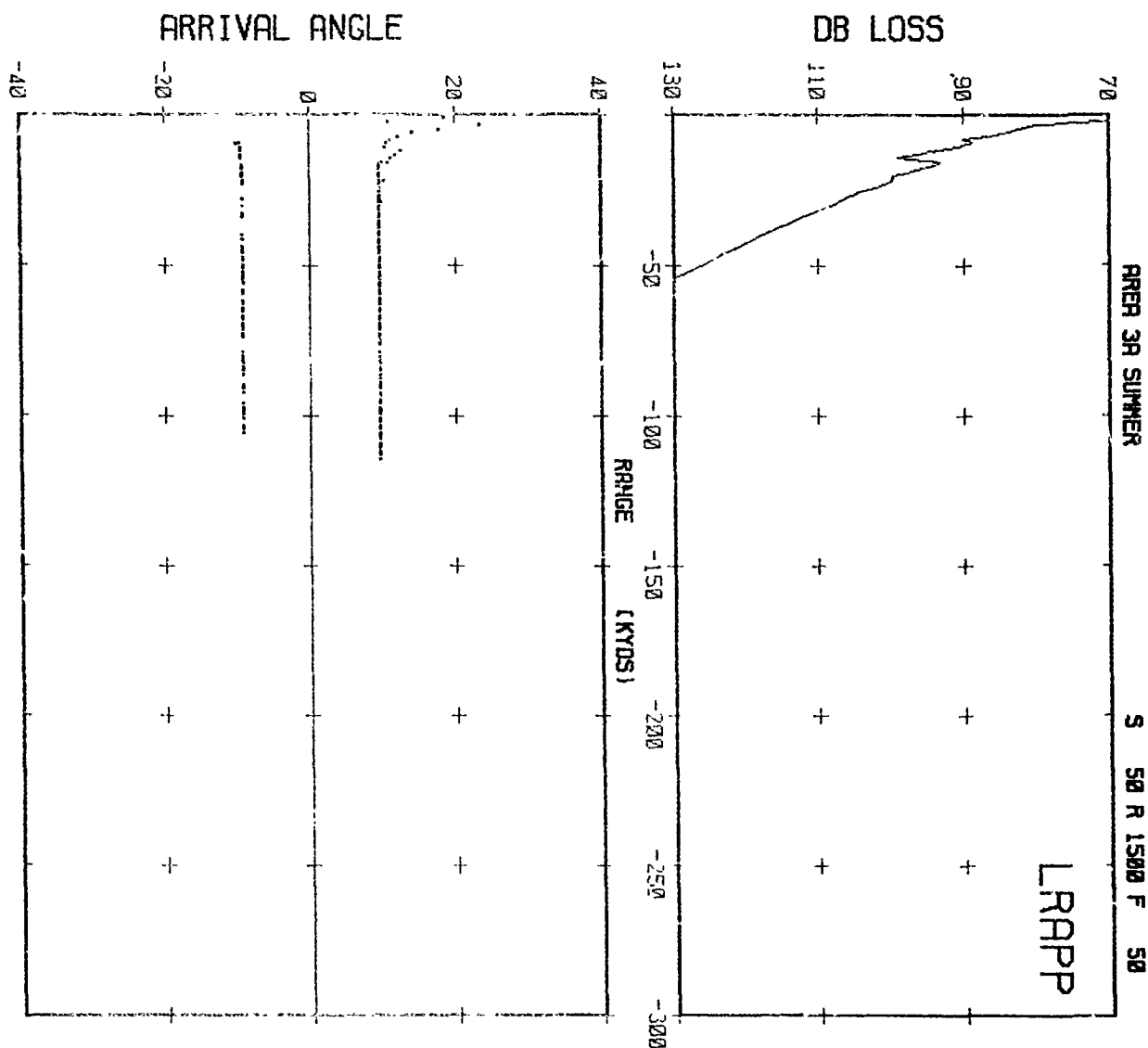


DEPTH IN METERS



NOISE (DB)



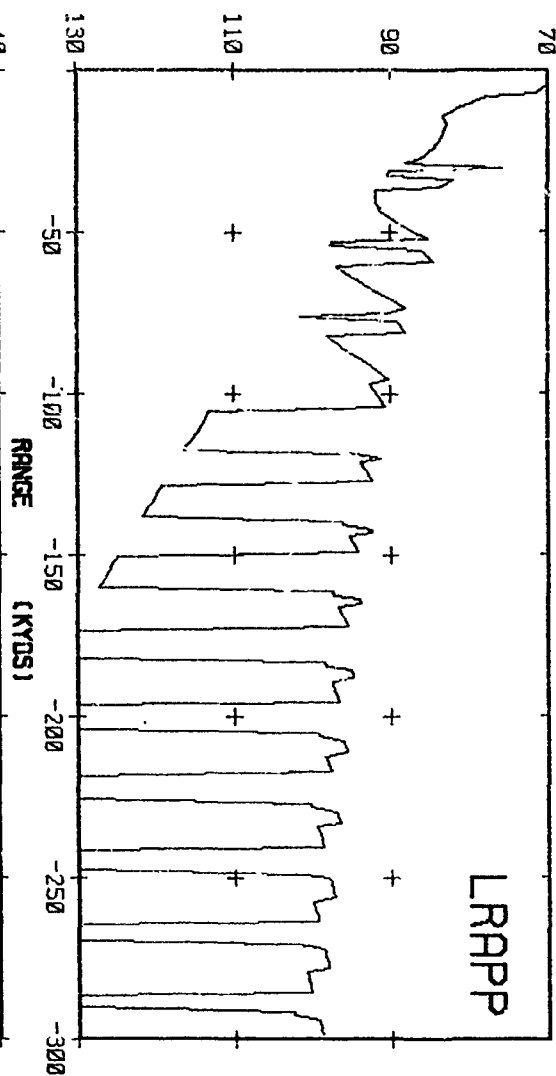


AREA 3A SUMNER

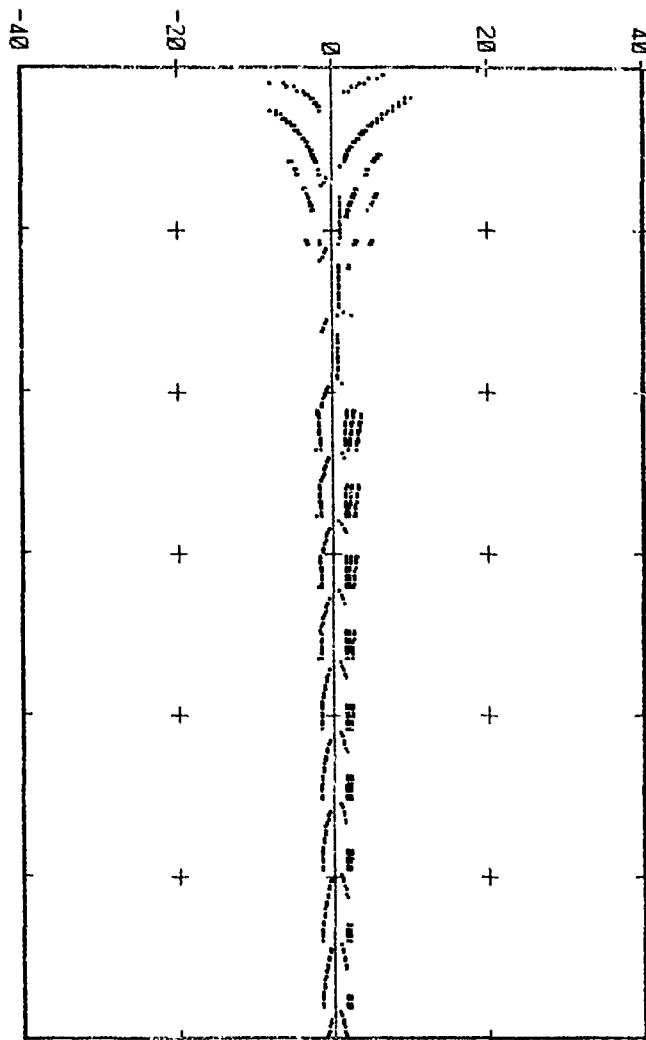
S 233 R 1500 F 50

1450 M/S 1500 1550

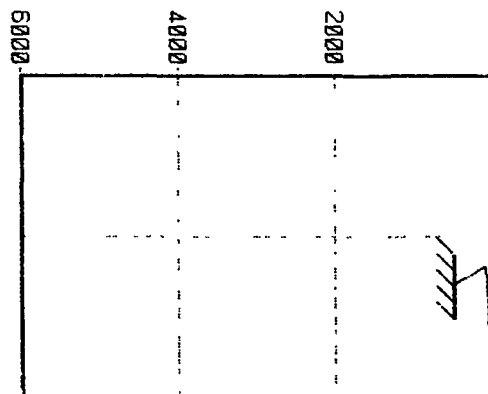
DB LOSS



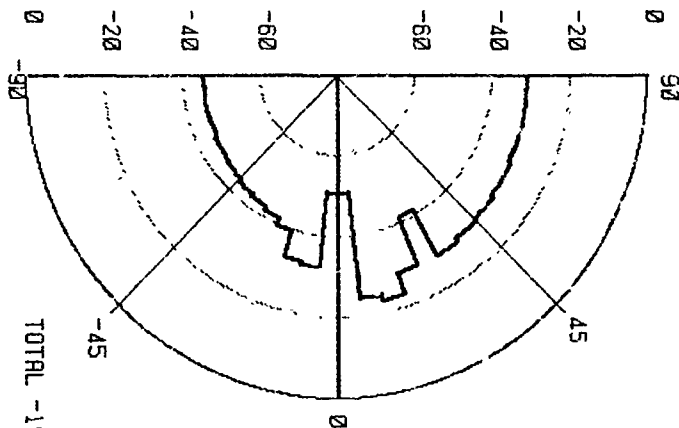
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



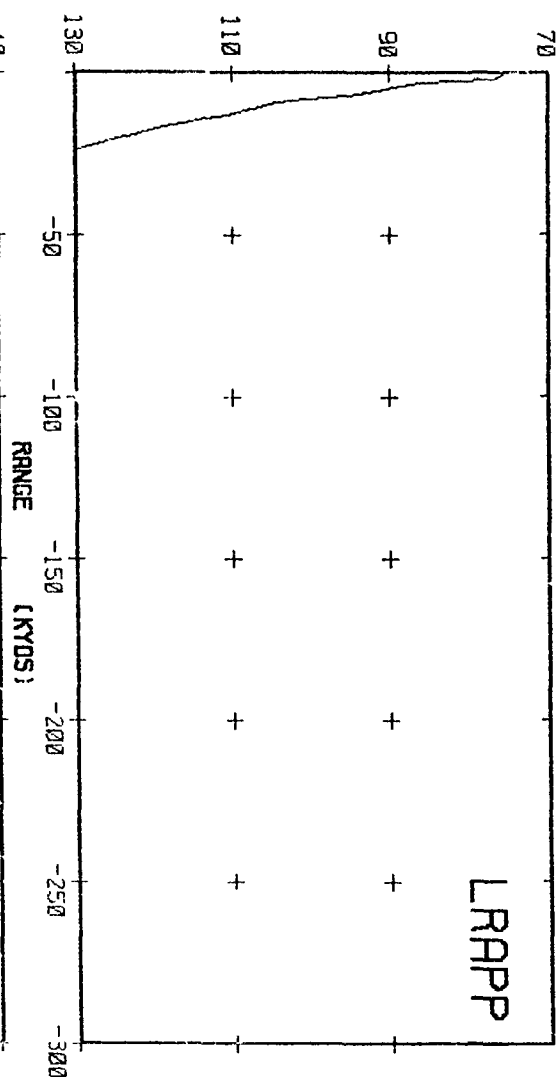
TOTAL -19.9 DB

ARRER 3A SUMMER

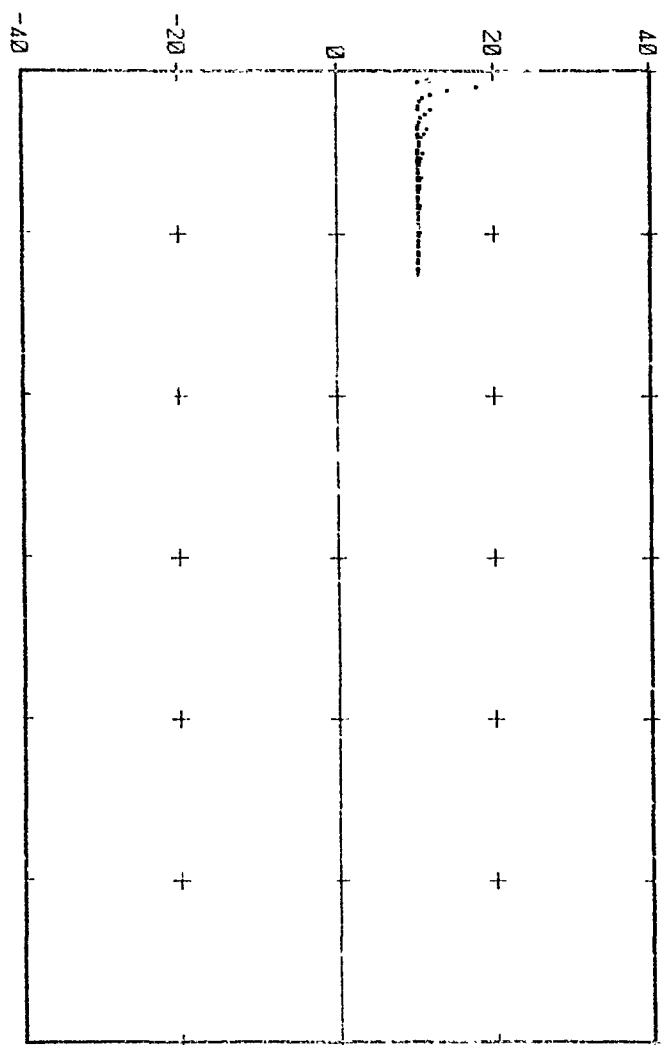
S 20 R 1640 F 50

1450 M/S 1500 1550

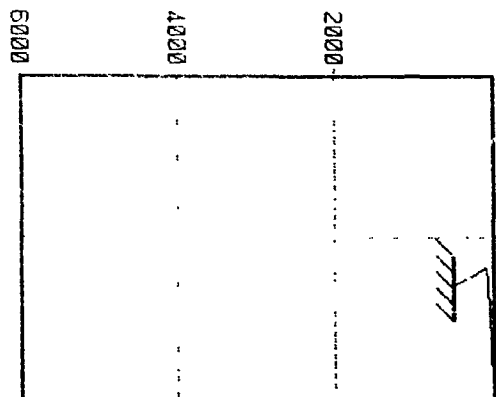
DB LOSS



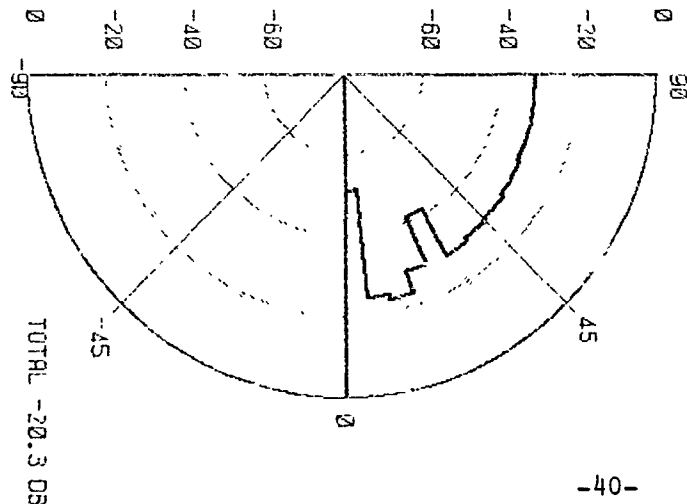
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

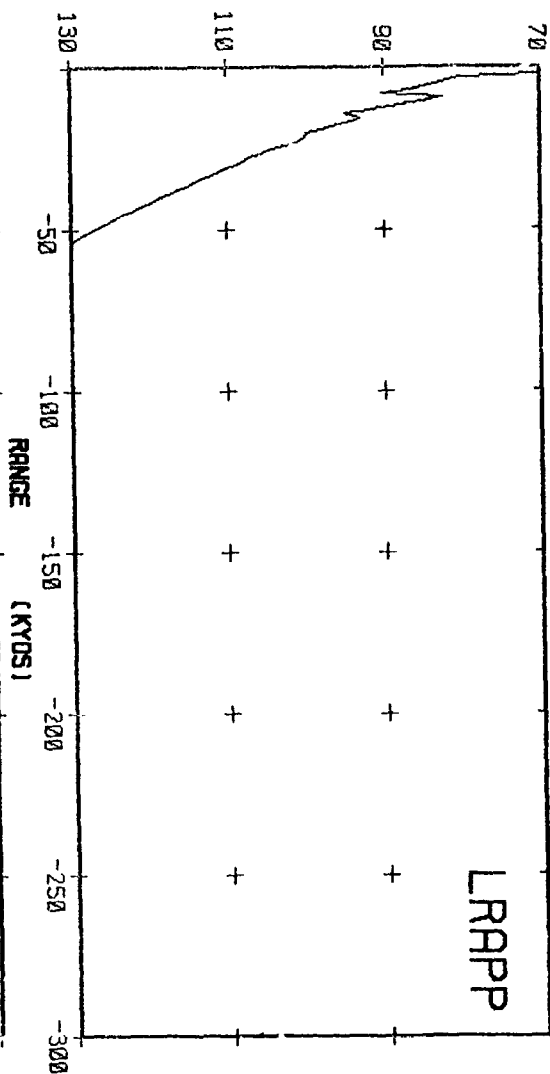


AREA 3A SUMMER

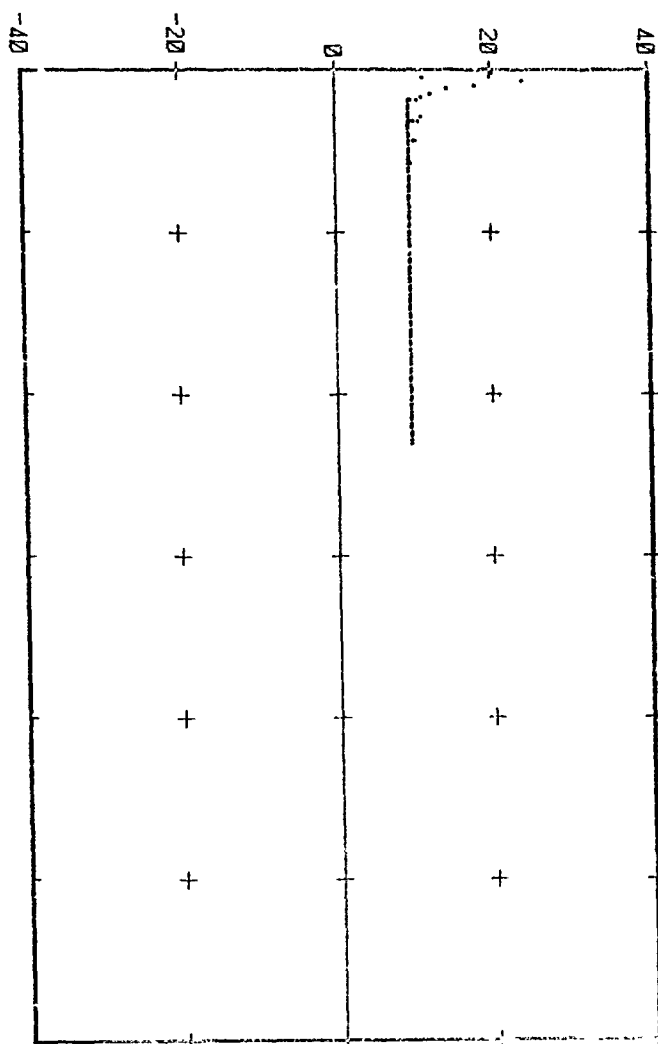
S 50 R 1640 F 50

1450 M/S 1500 1550

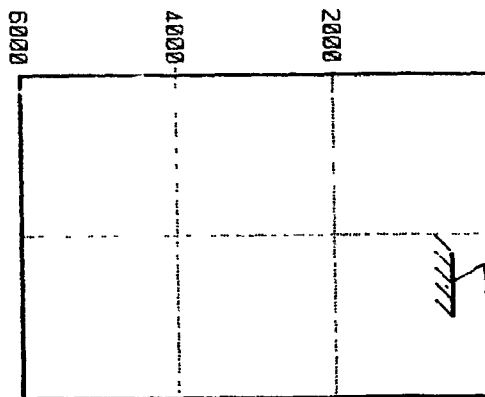
DB LOSS



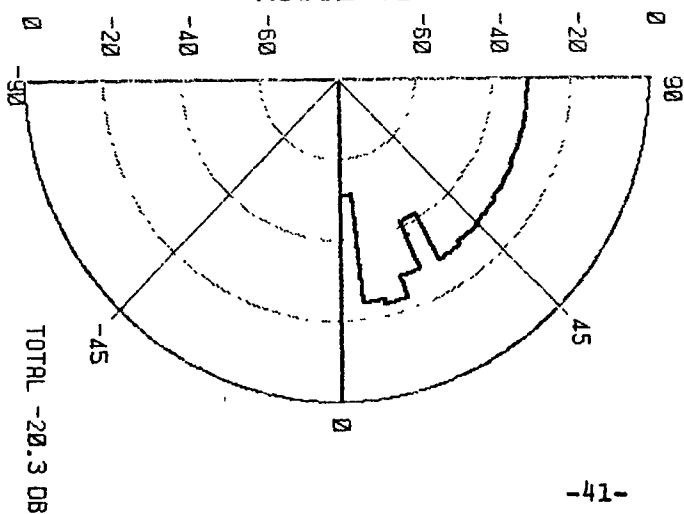
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

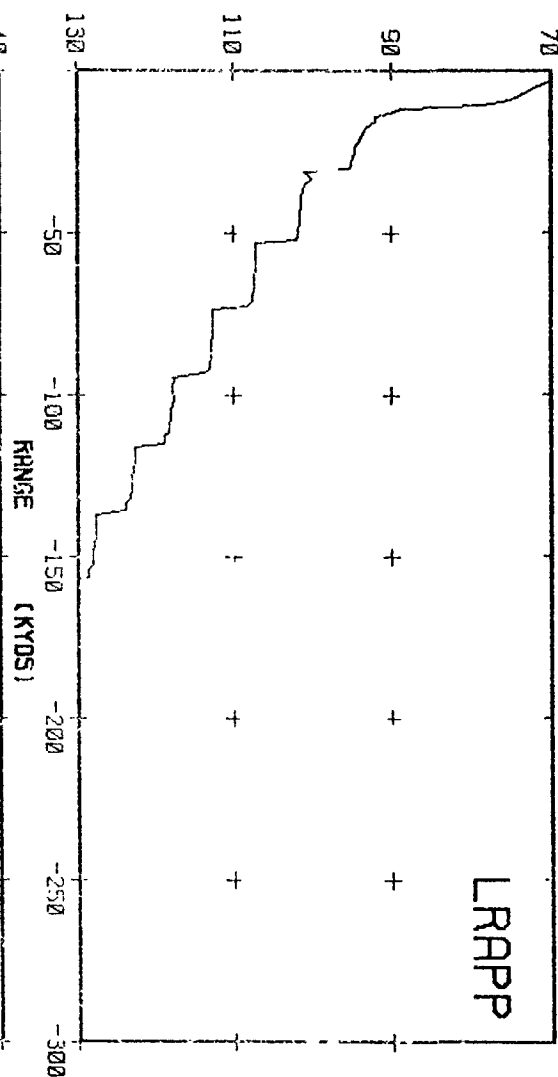


AREA 34 SUMNER

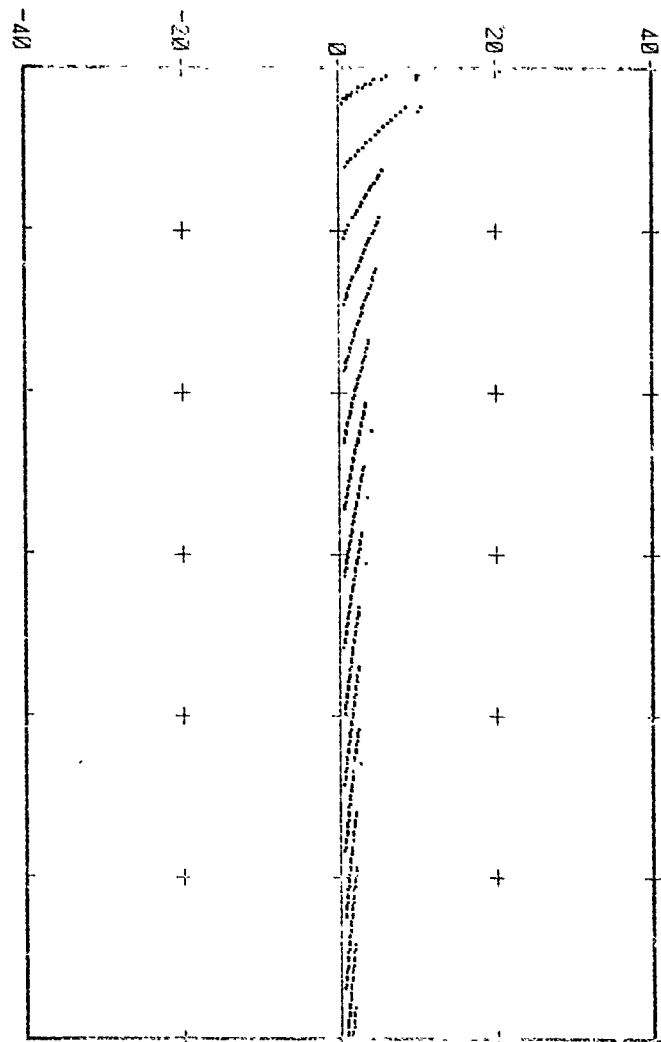
S 233 R 1640 F 50

1450 M/S 1500 1550

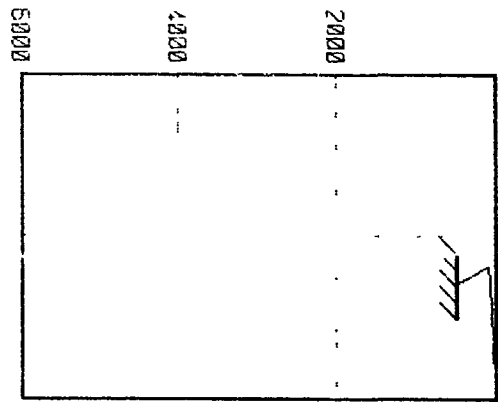
DB LOSS



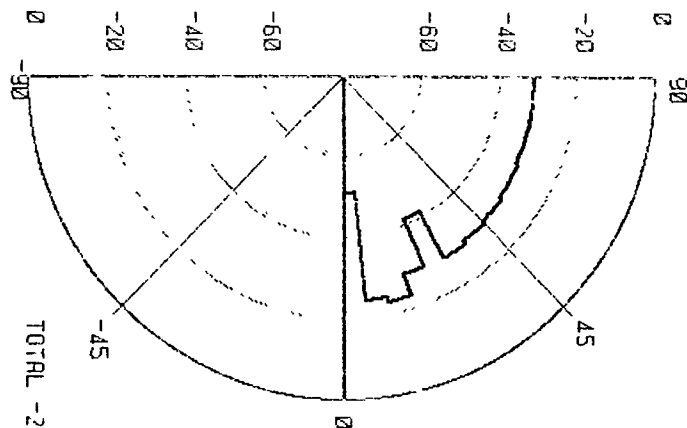
ARRIVAL ANGLE

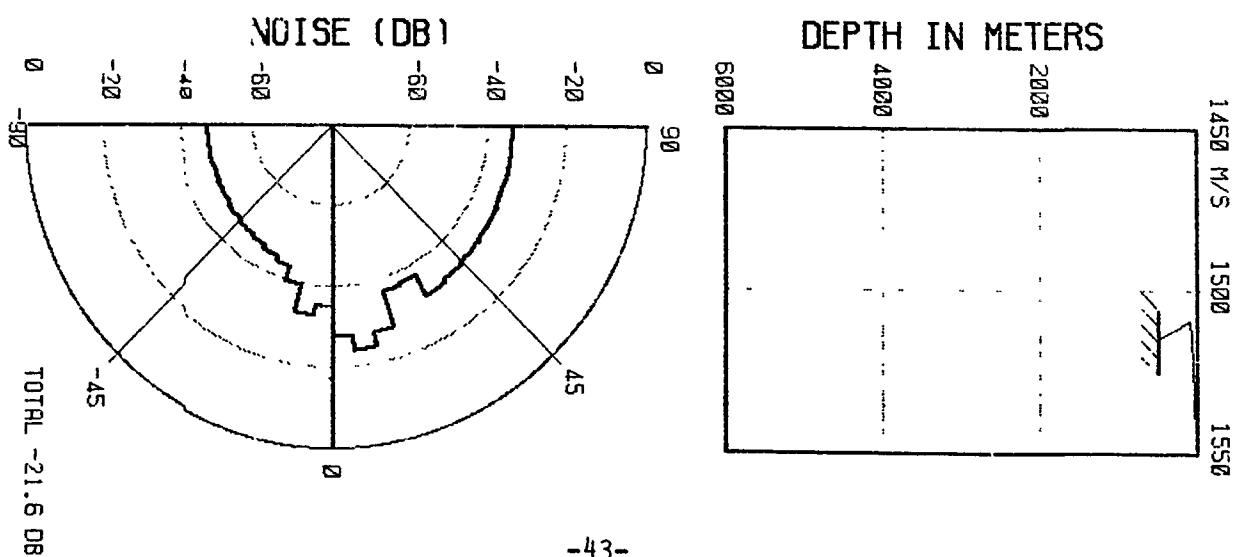
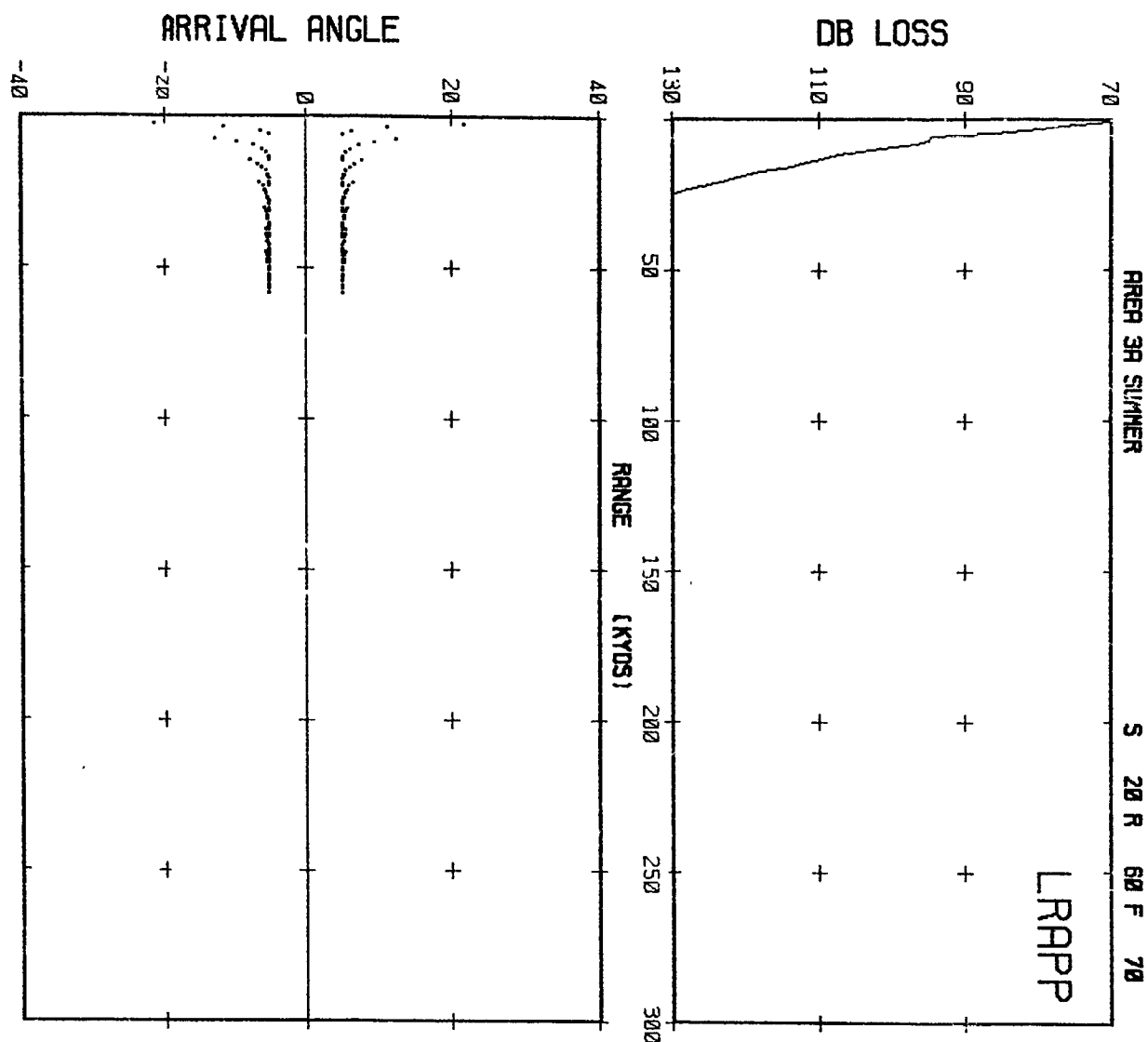


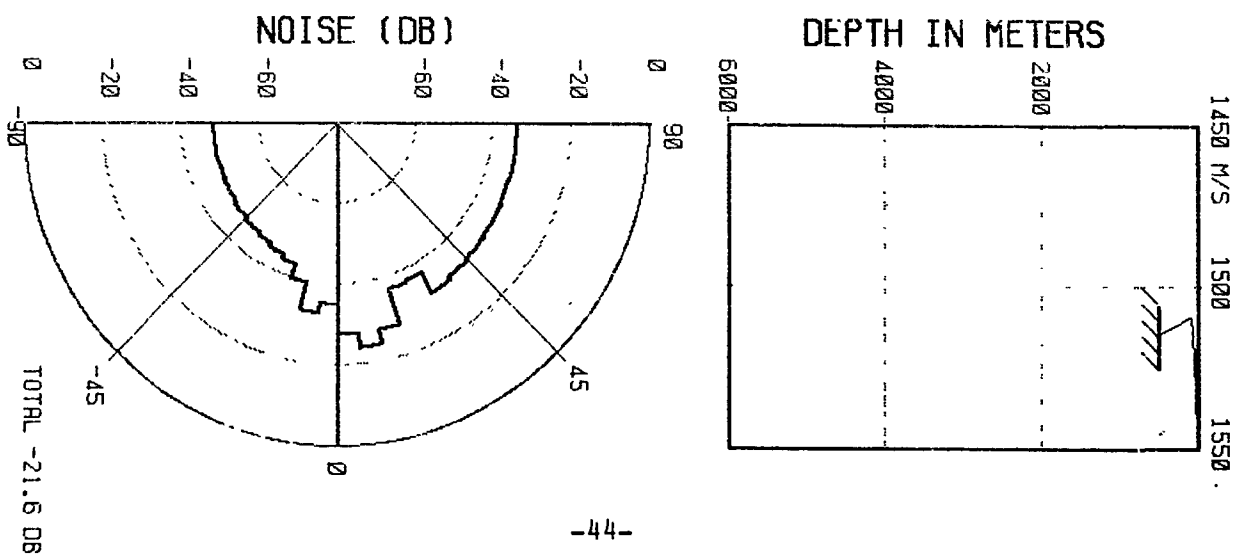
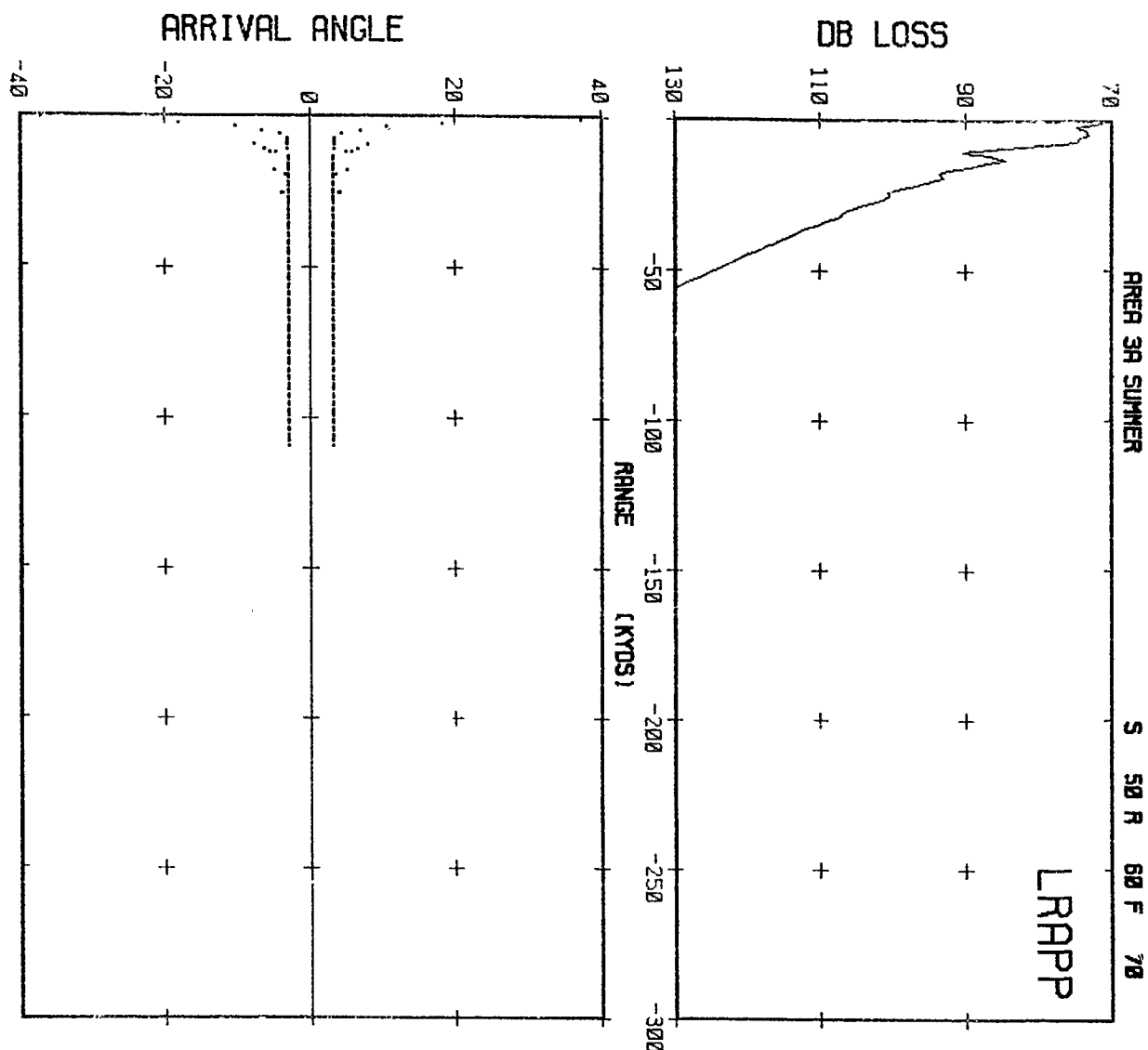
DEPTH IN METERS



NOISE (DB)





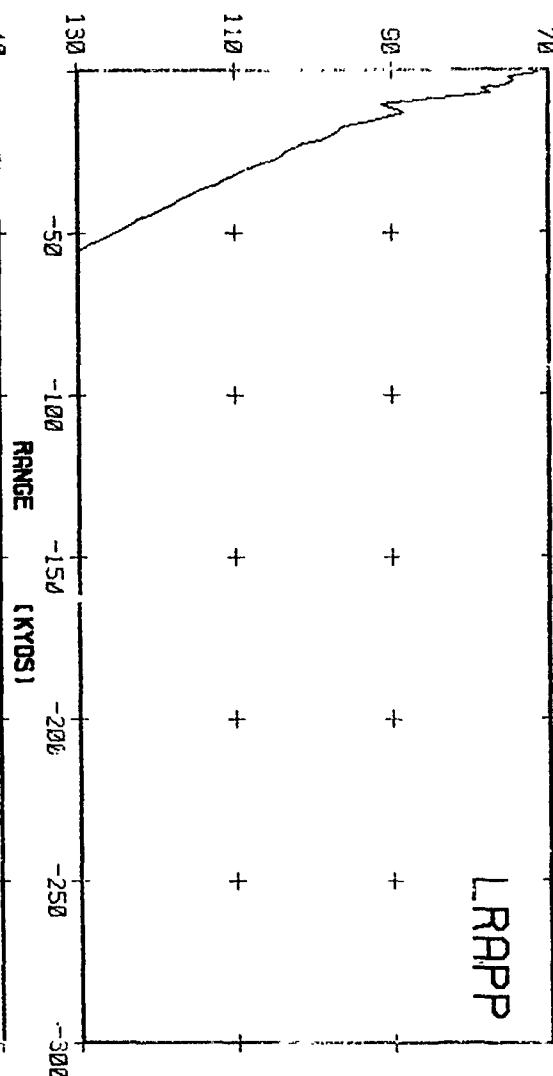


AREA 3R SUMMER

S 233 R 60 F 70

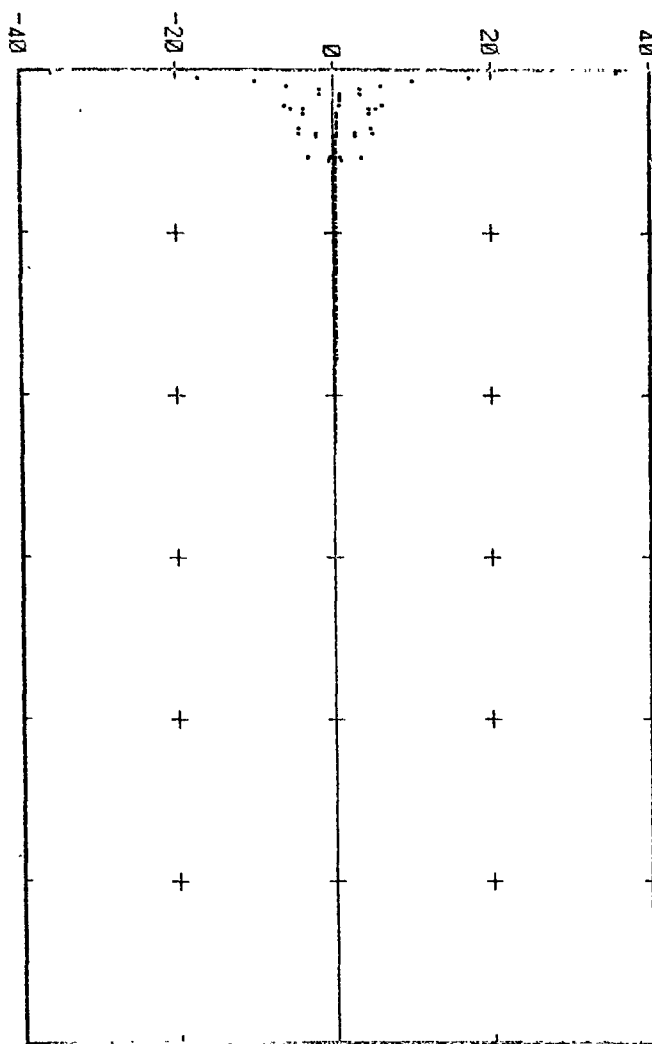
1450 M/S 1500 1550

DB LOSS

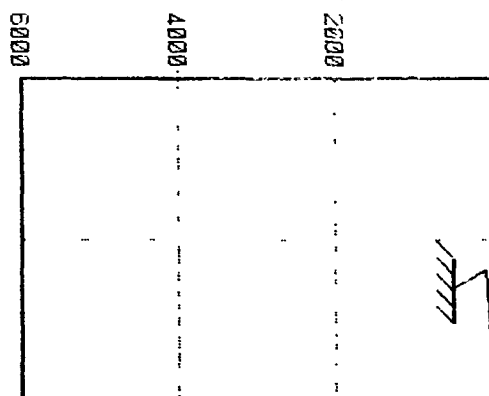


L.RAPP

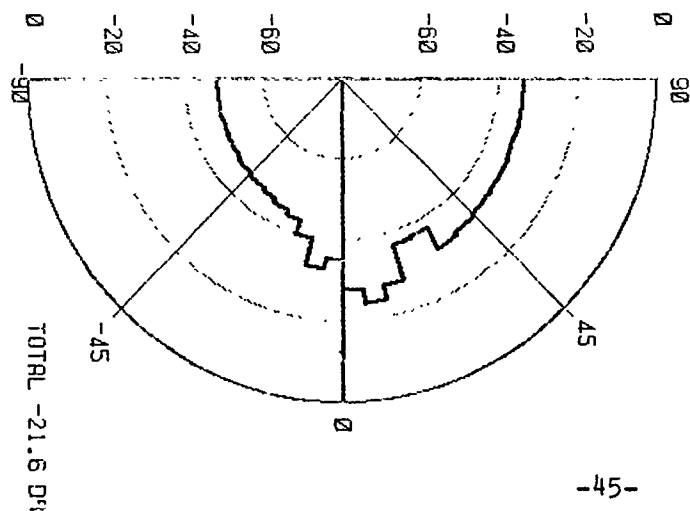
ARRIVAL ANGLE

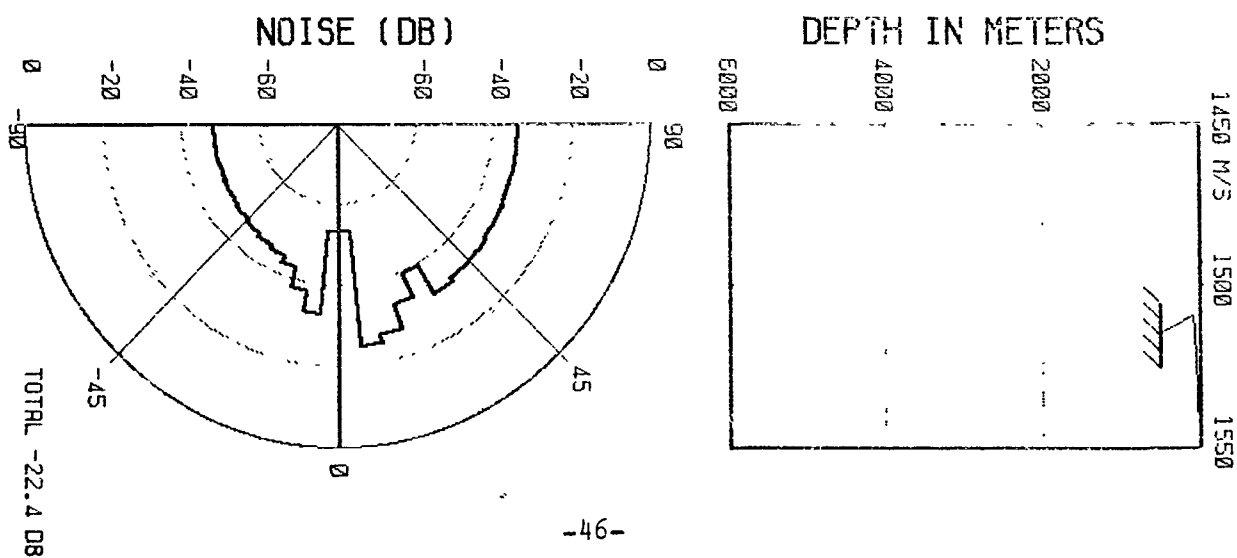
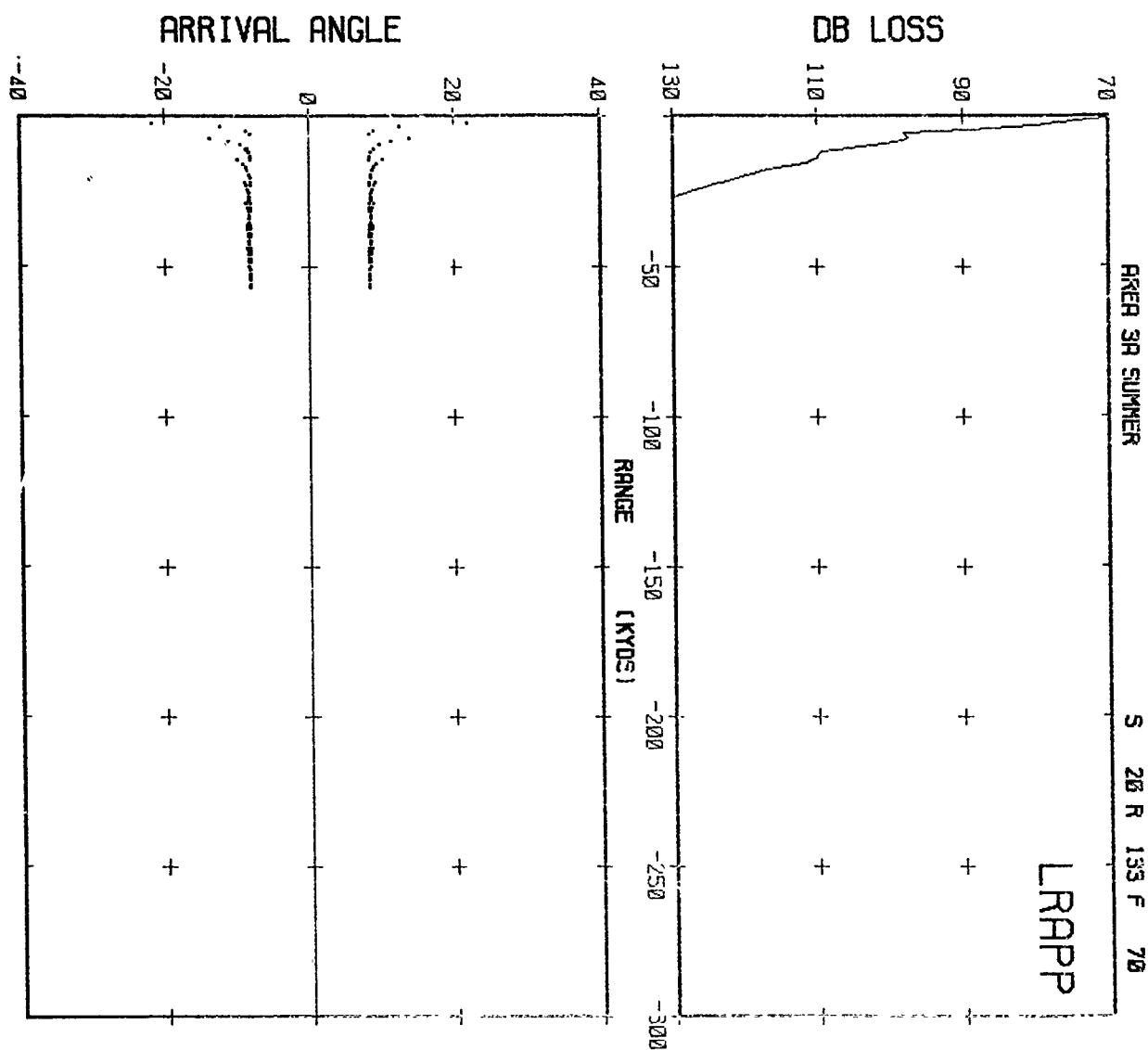


DEPTH IN METERS



NOISE (DB)



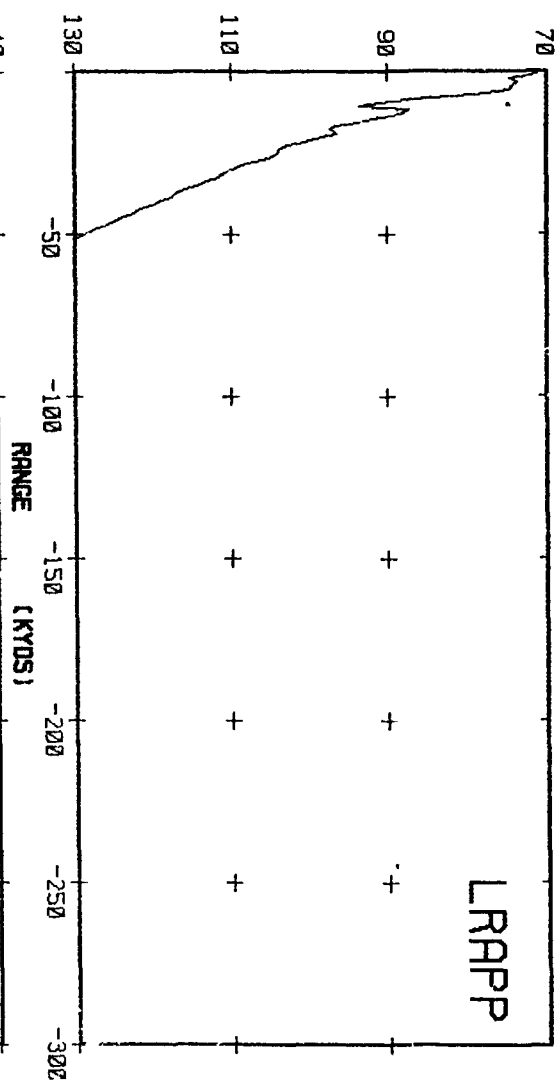


AREA 3H SUMMER

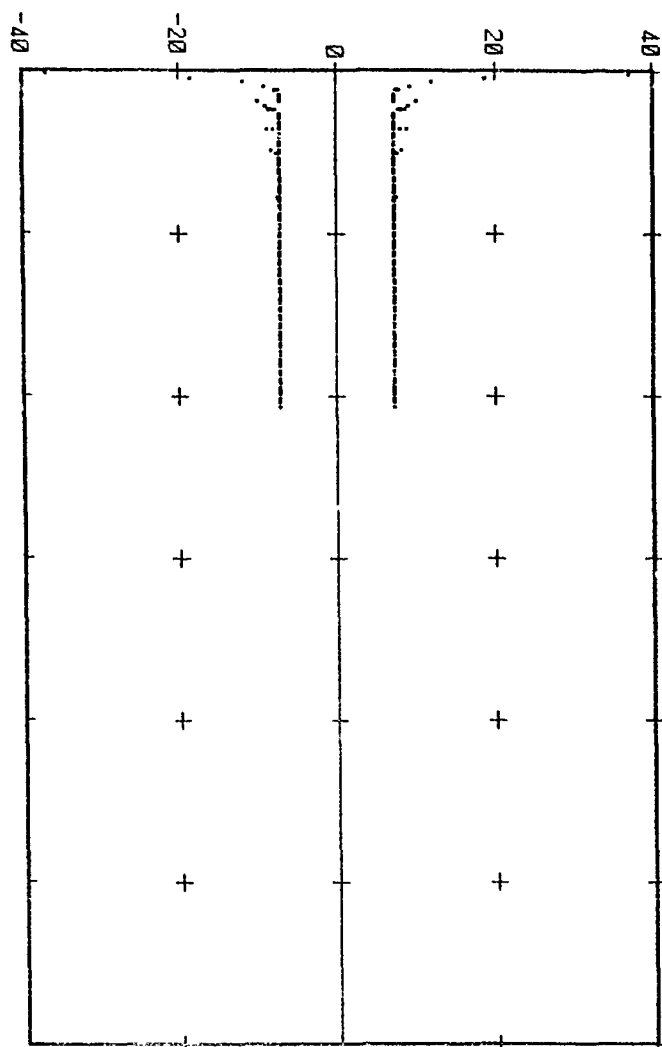
S 50 R 133 F 70

1450 M/S 1500 1550

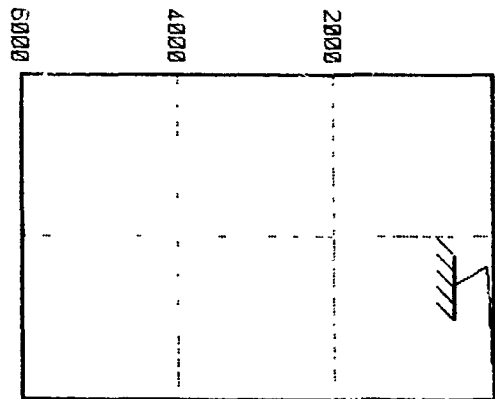
DB LOSS



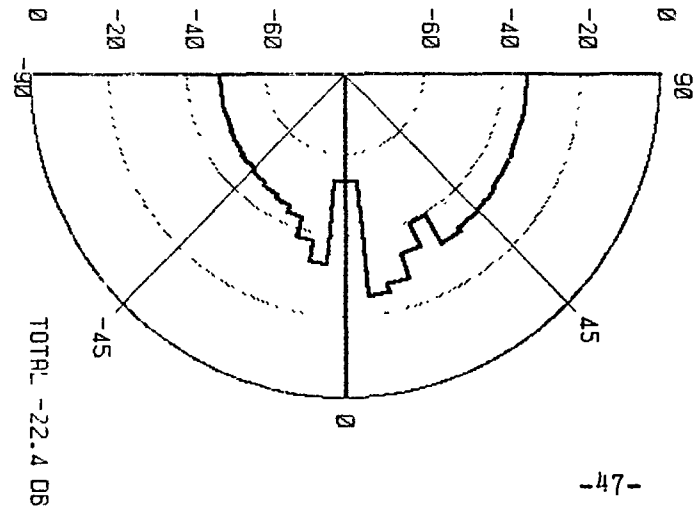
ARRIVAL ANGLE

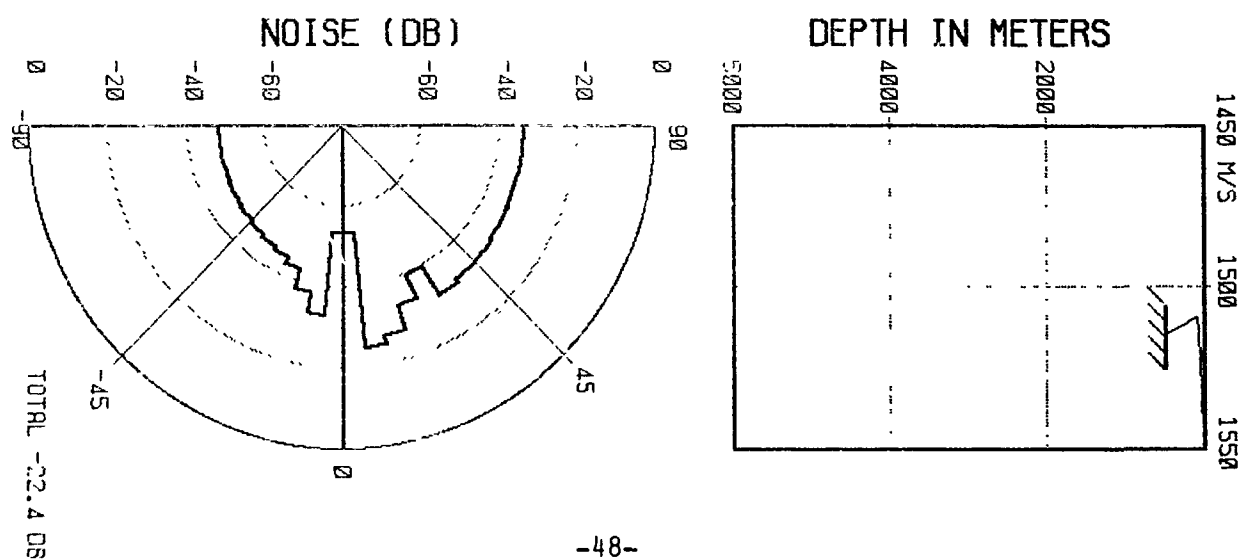
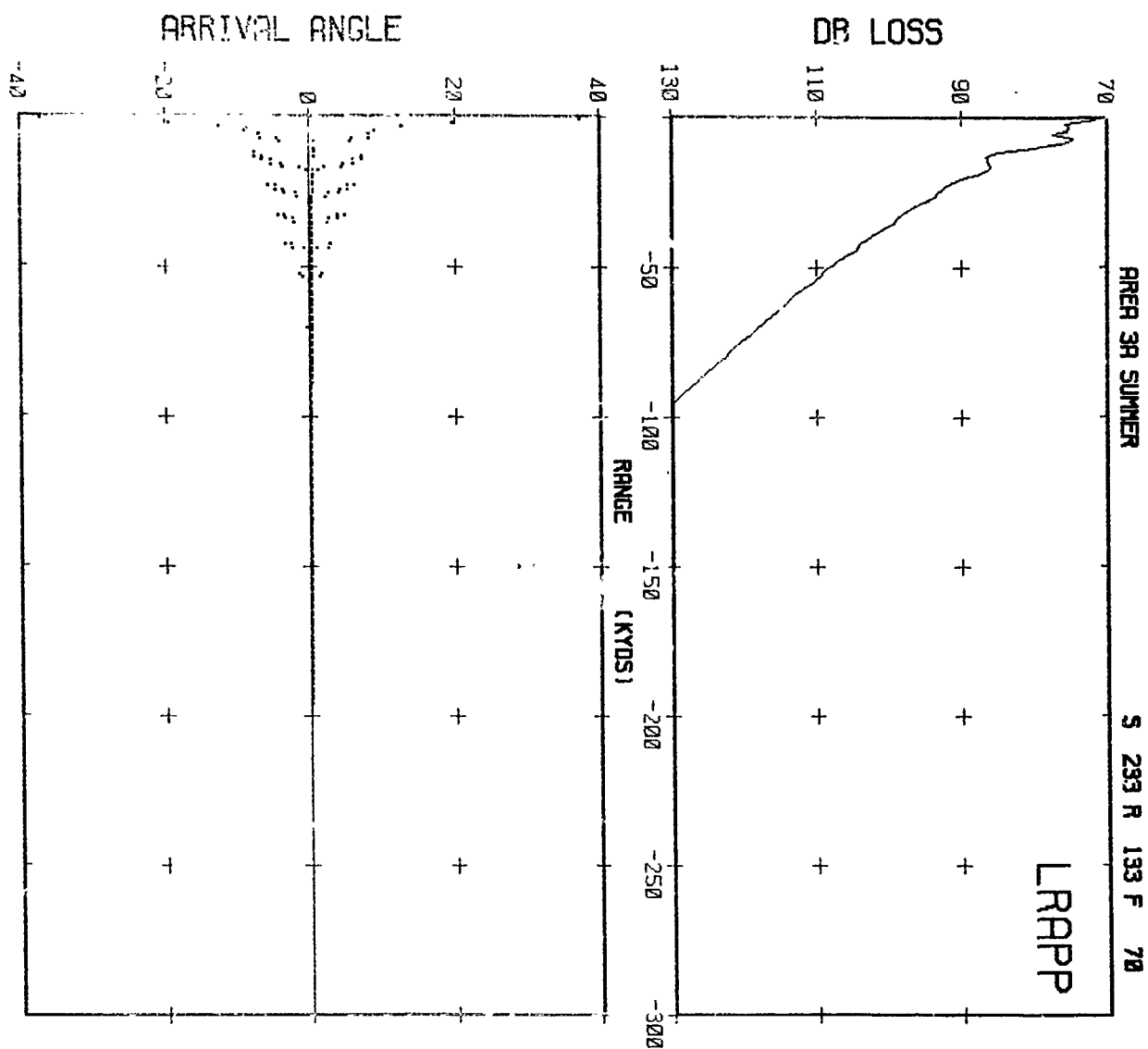


DEPTH IN METERS



NOISE (DB)



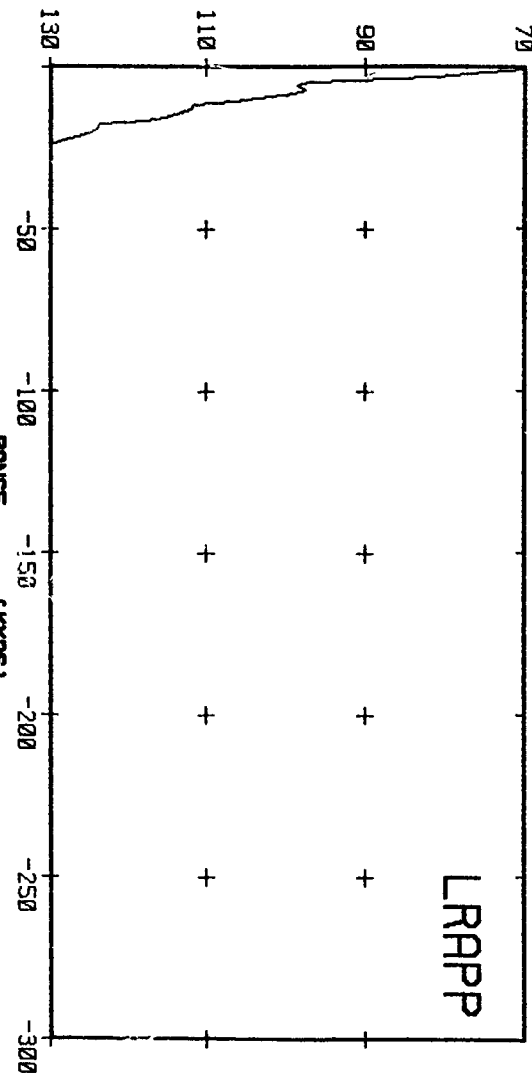


AREA 3A SUMMER

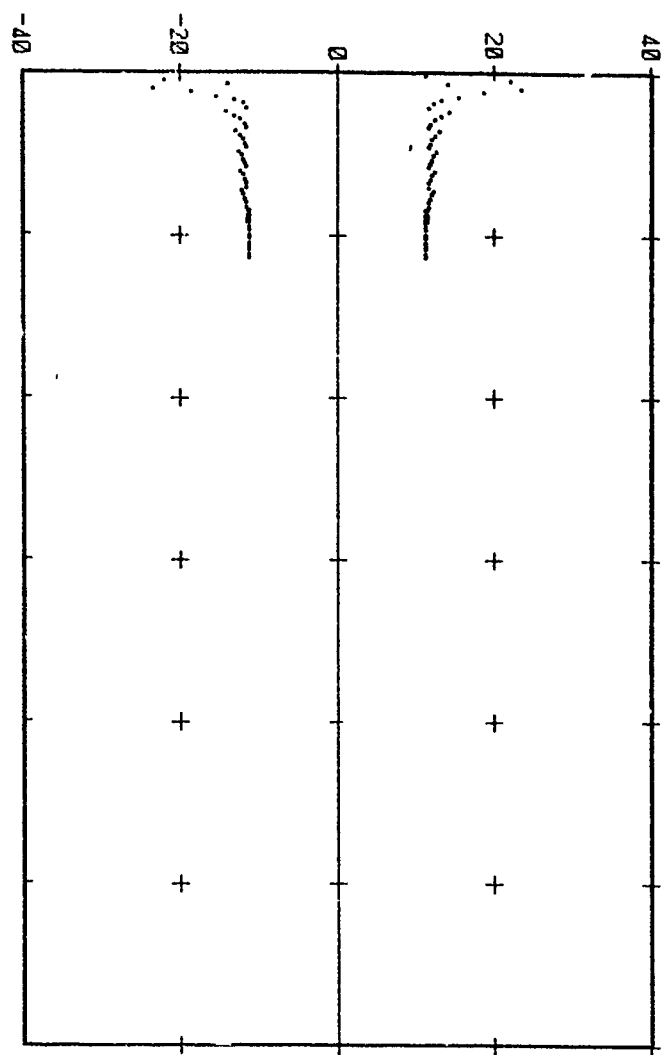
S 20 R 262 F 70

LRAPP

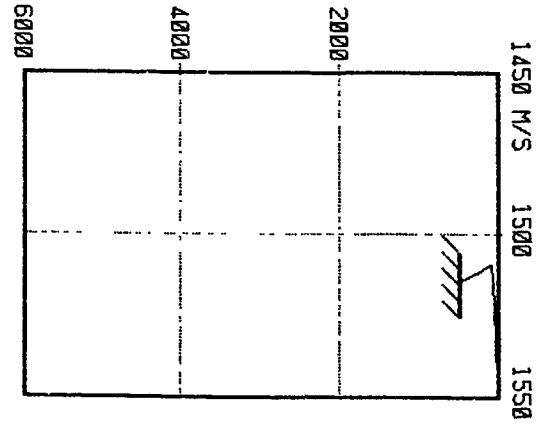
DB LOSS



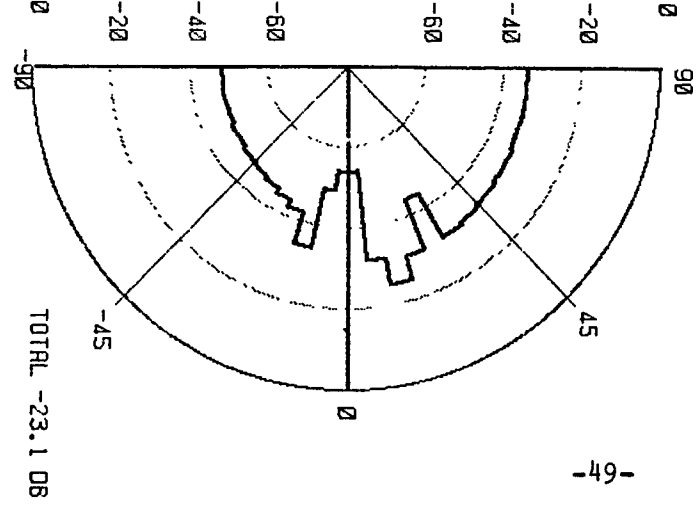
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



-49-

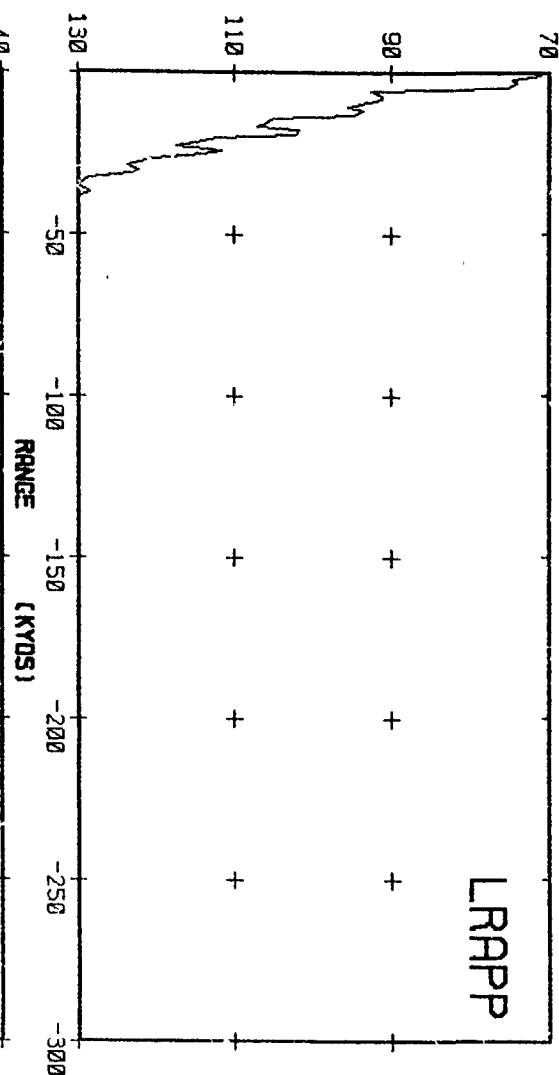
AREA 3A SUMMER

S 50 R 252 F 70

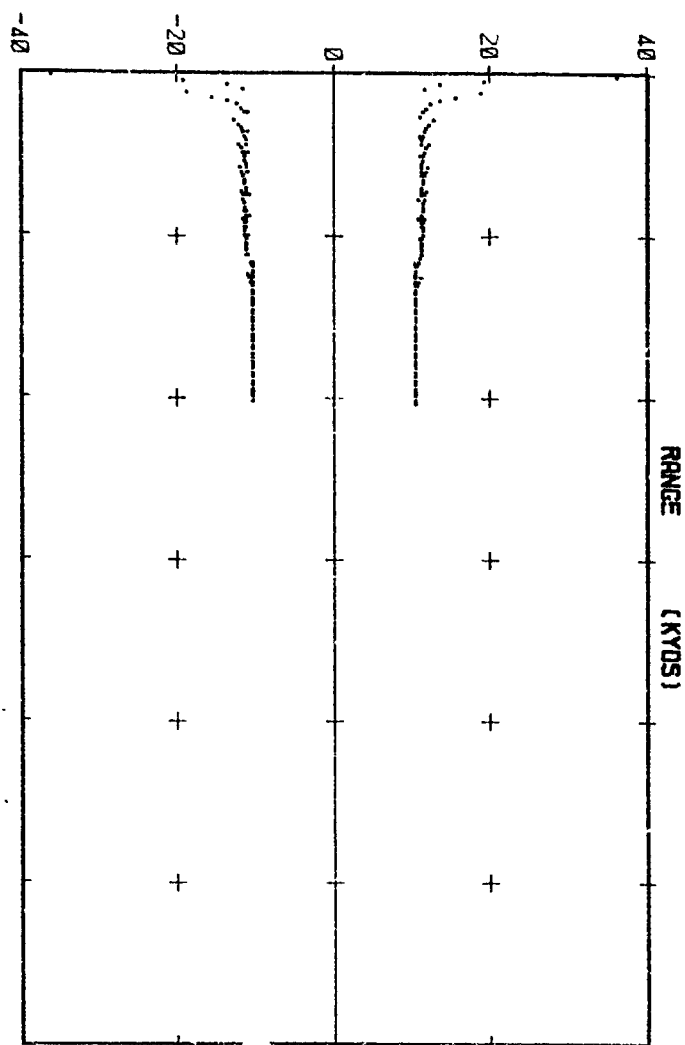
1450 M/S 1500

1550

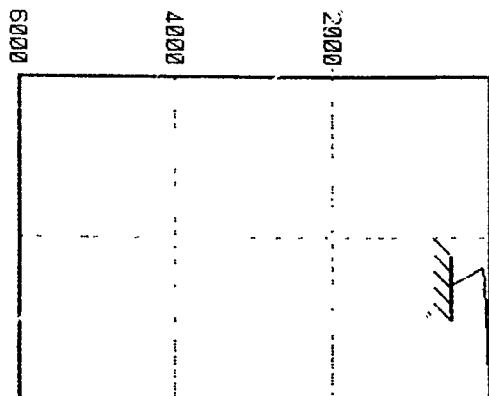
DB LOSS



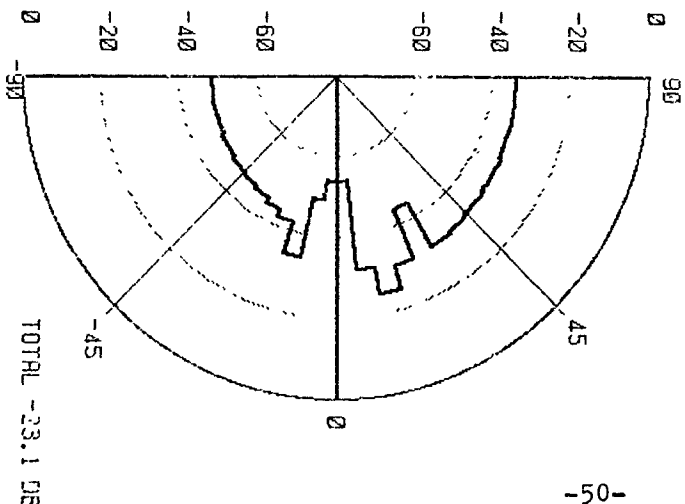
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

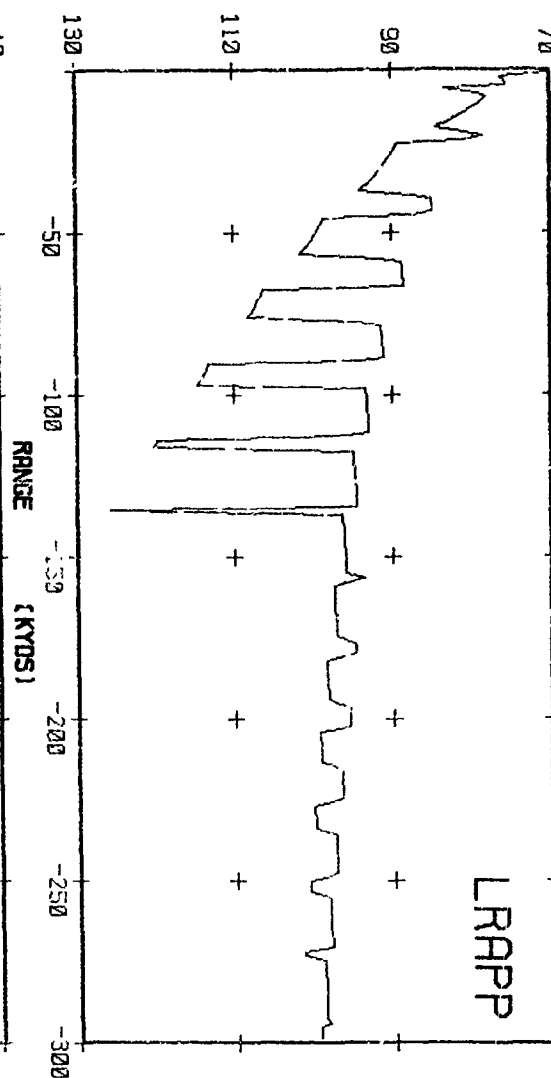


PRER 3R SUMMER

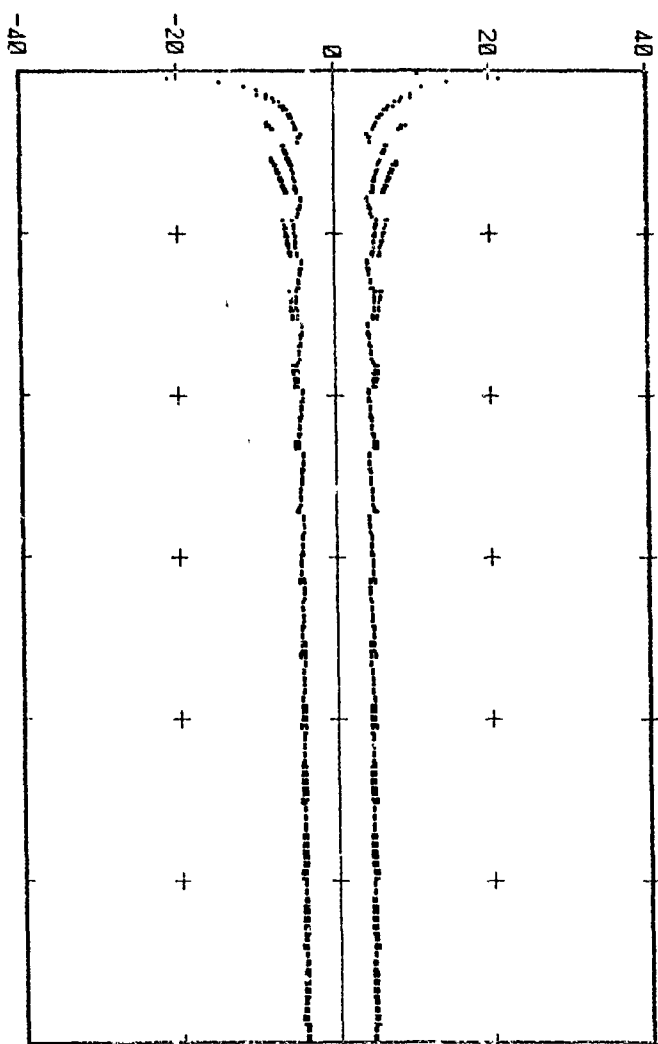
S 233 R 262 F 70

1450 M/S 1500 1550

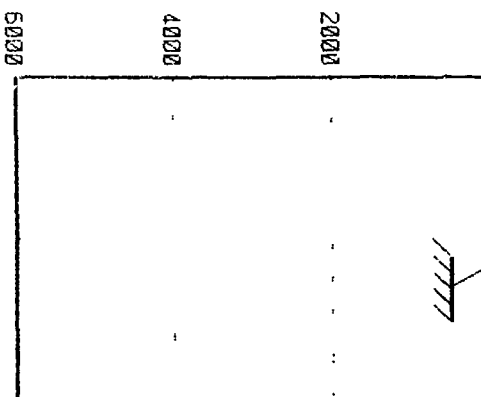
DB LOSS



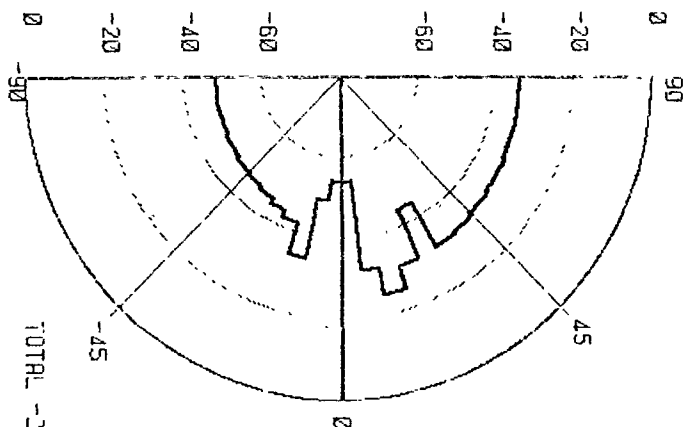
ARRIVAL ANGLE



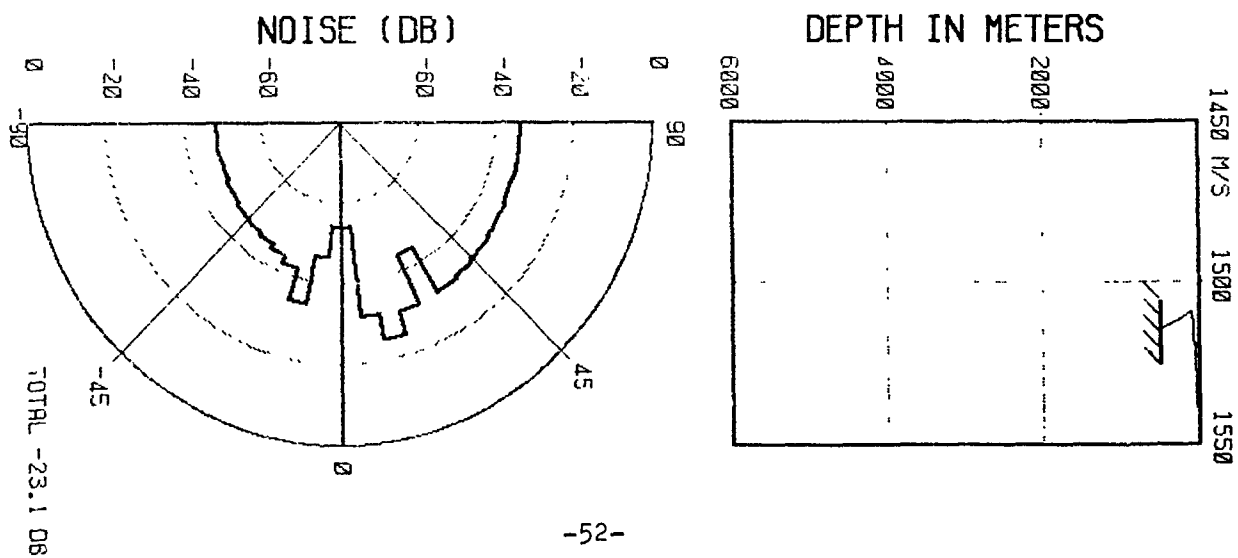
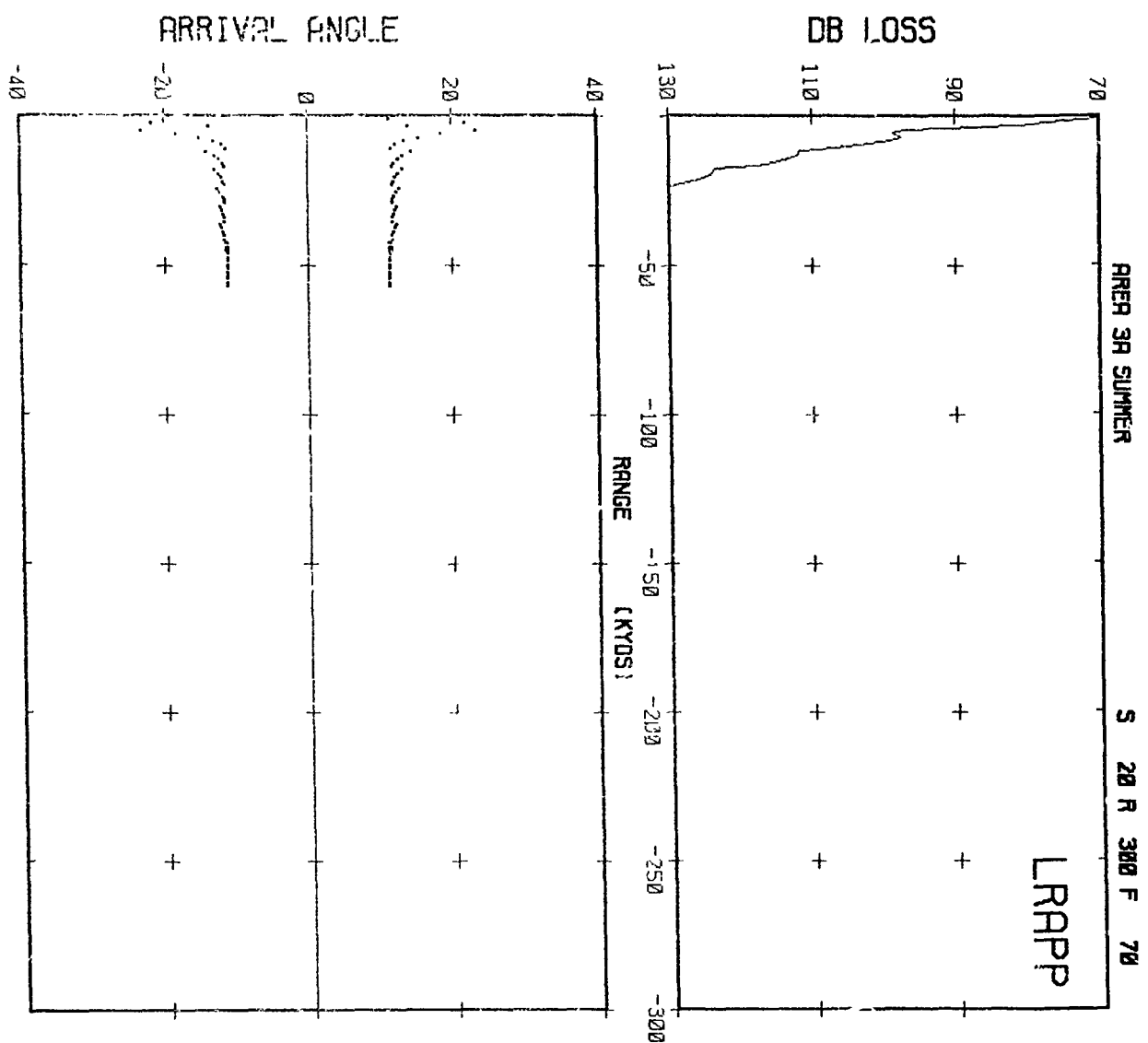
DEPTH IN METERS

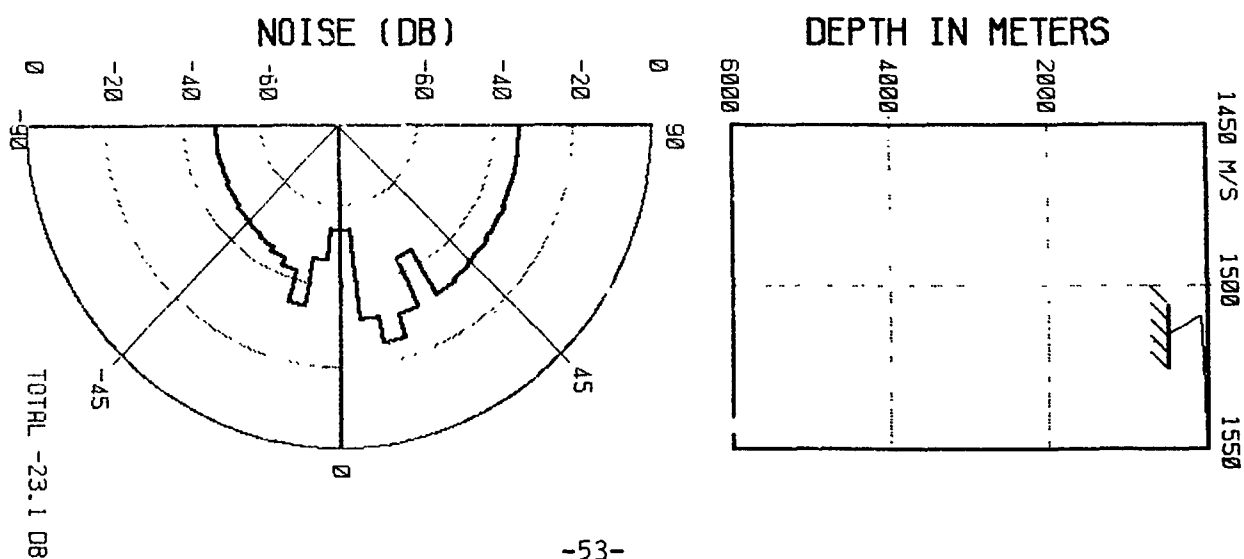
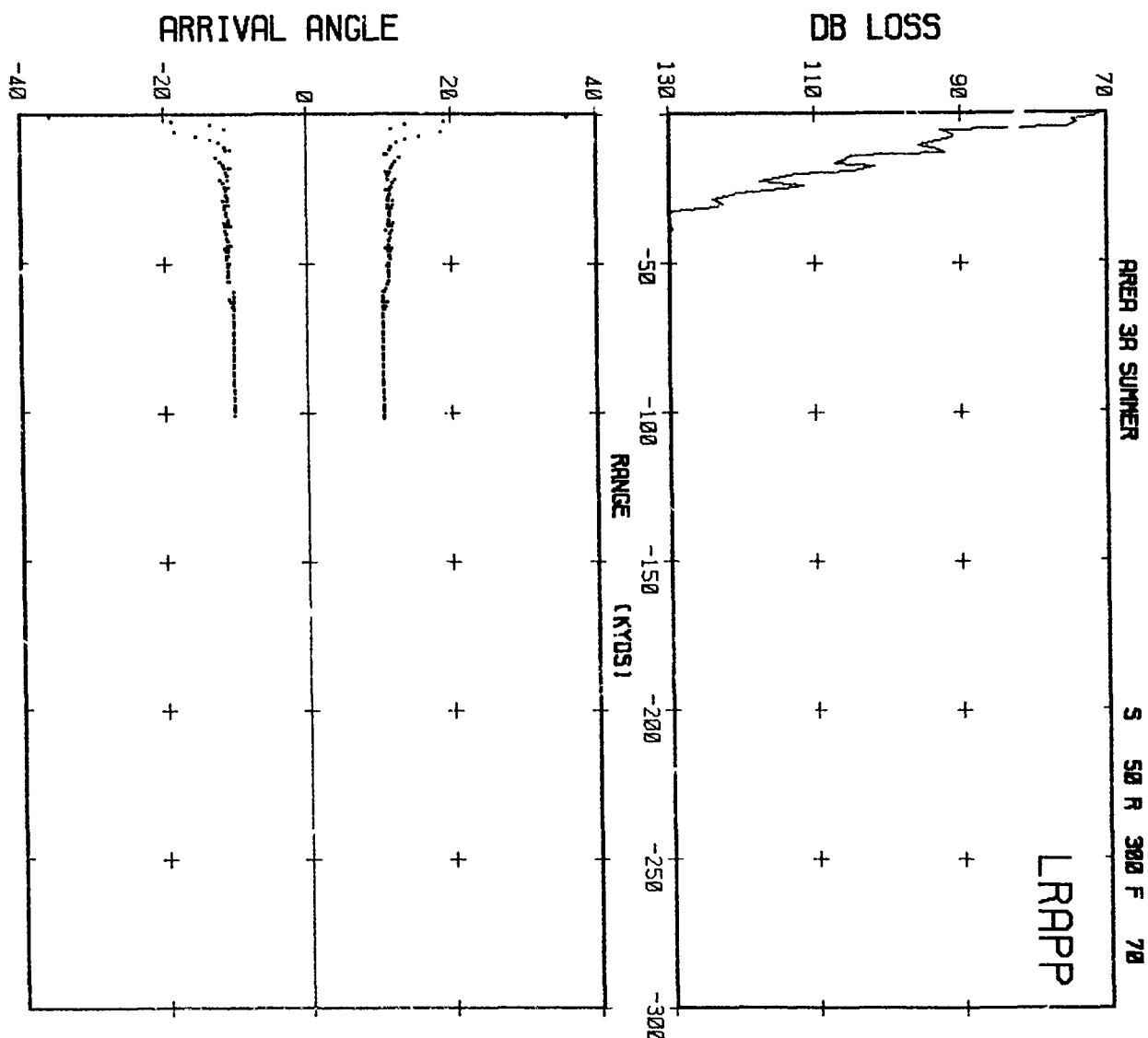


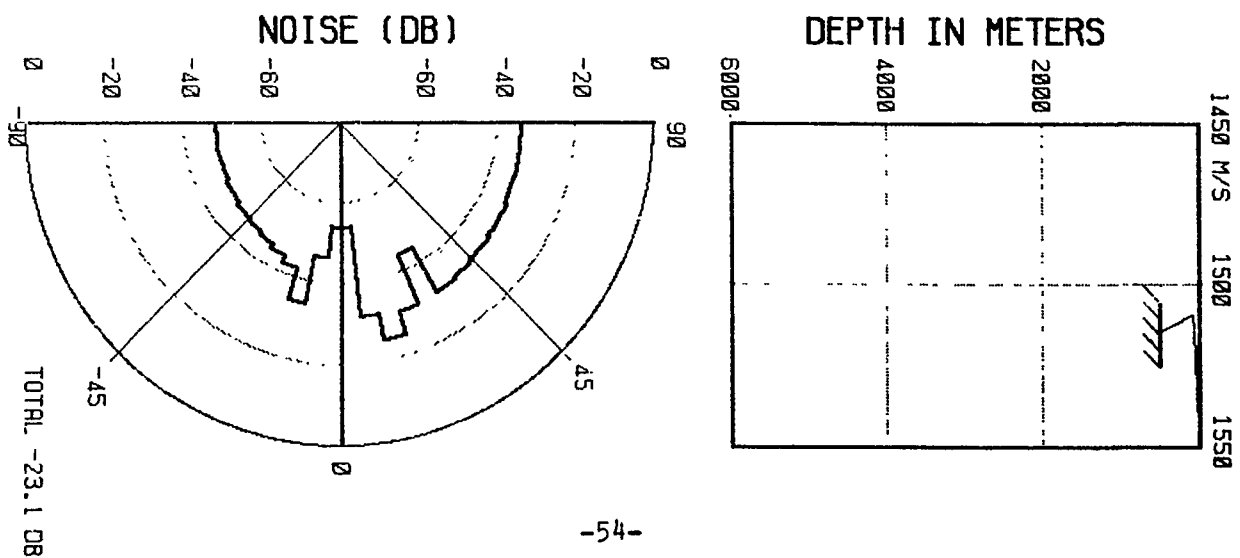
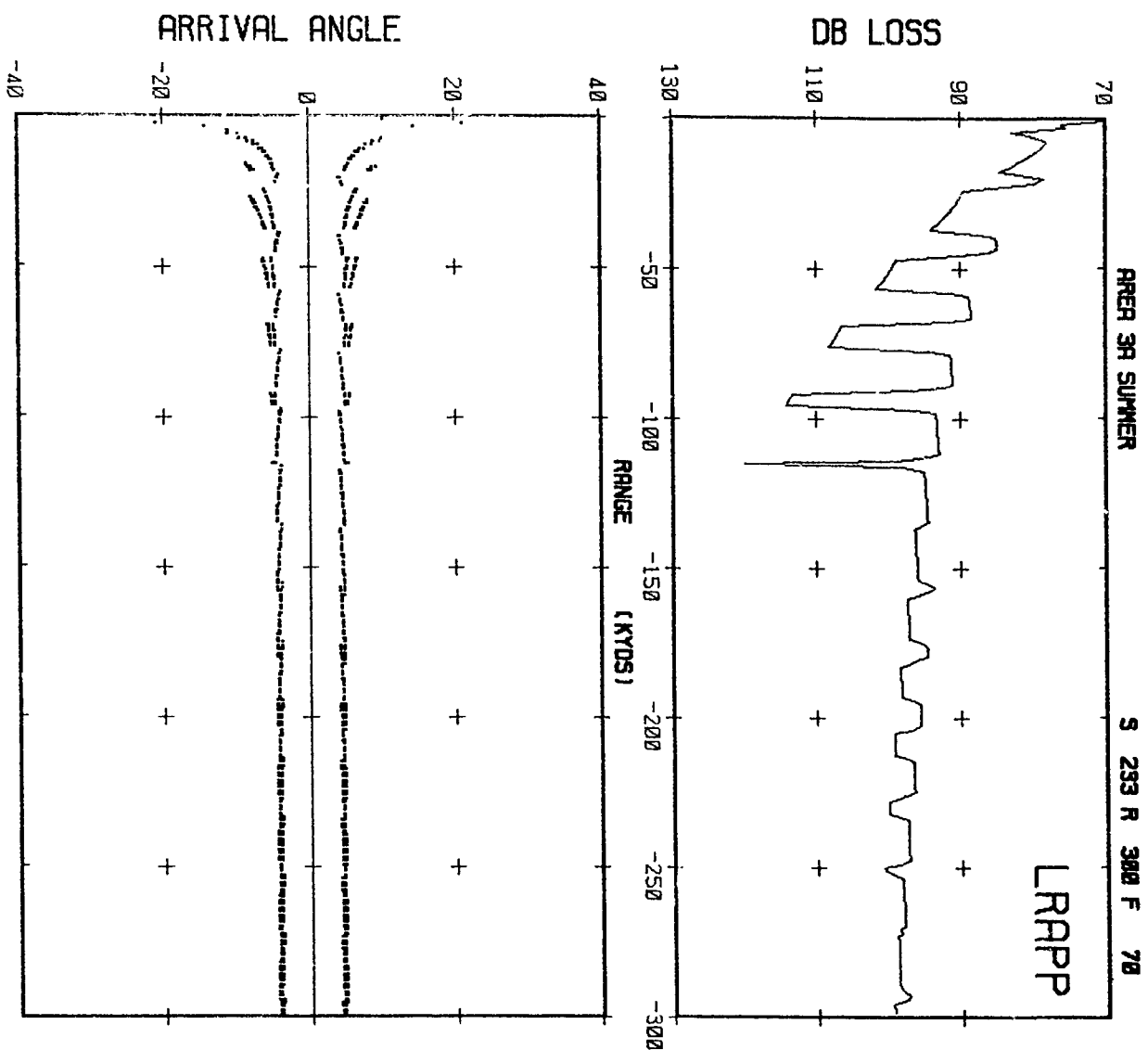
NOISE (DB)



TOTRL -23.1 DB







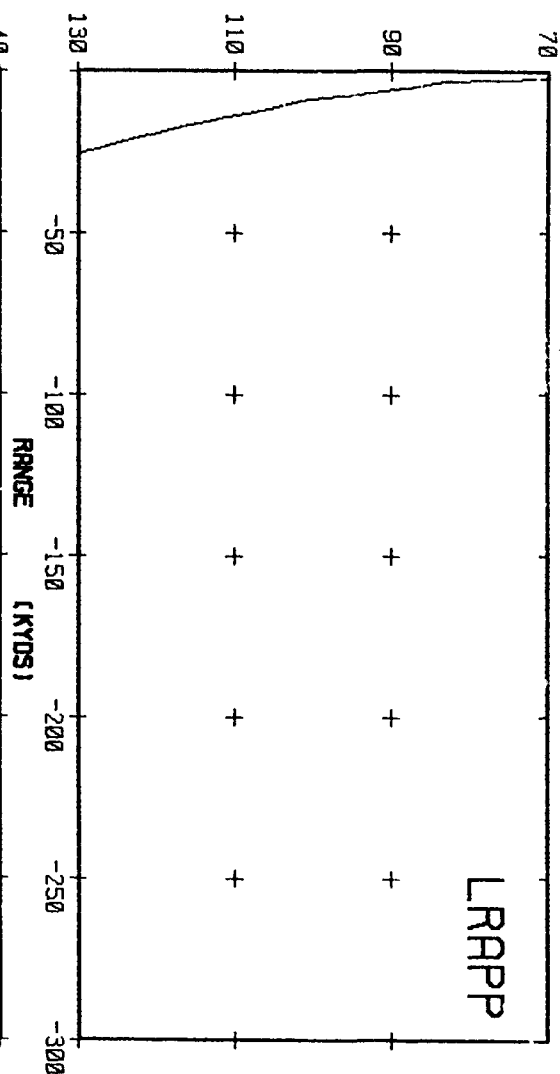
AREA 3R SUMMER

S 20 R 1000 F 70

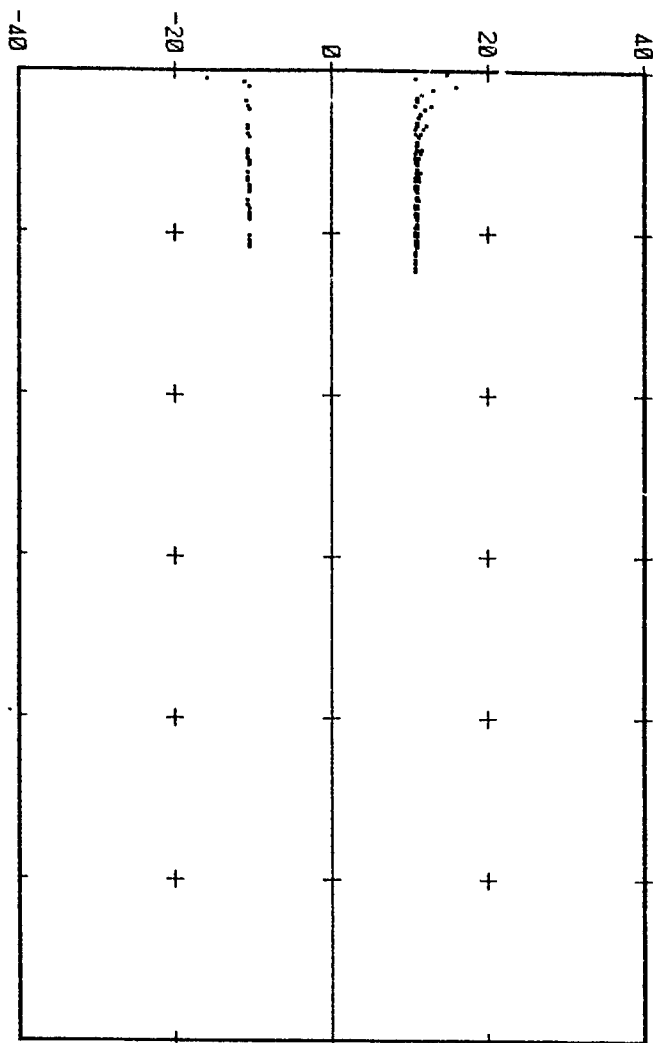
1450 M/S 1500

1550

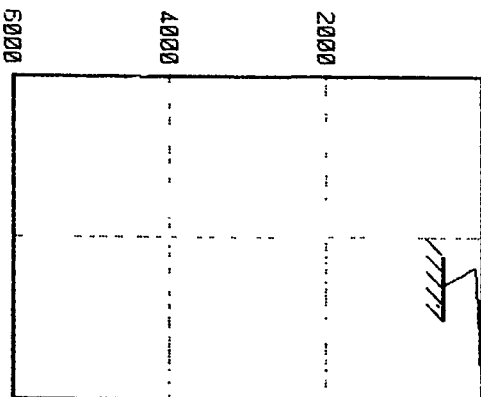
DB LOSS



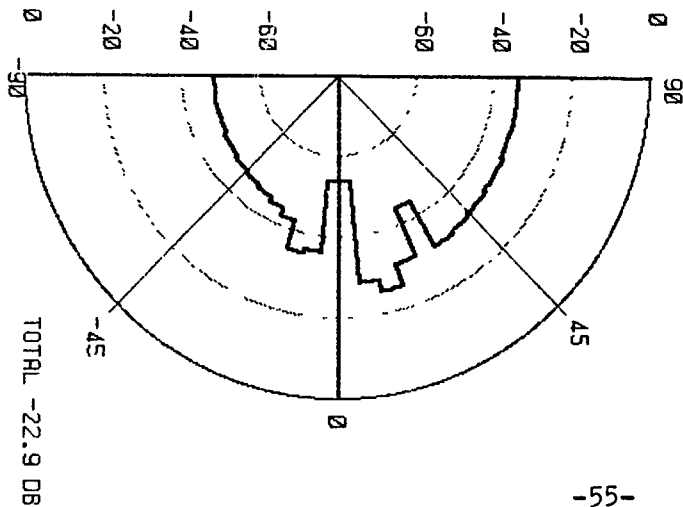
ARRIVAL ANGLE

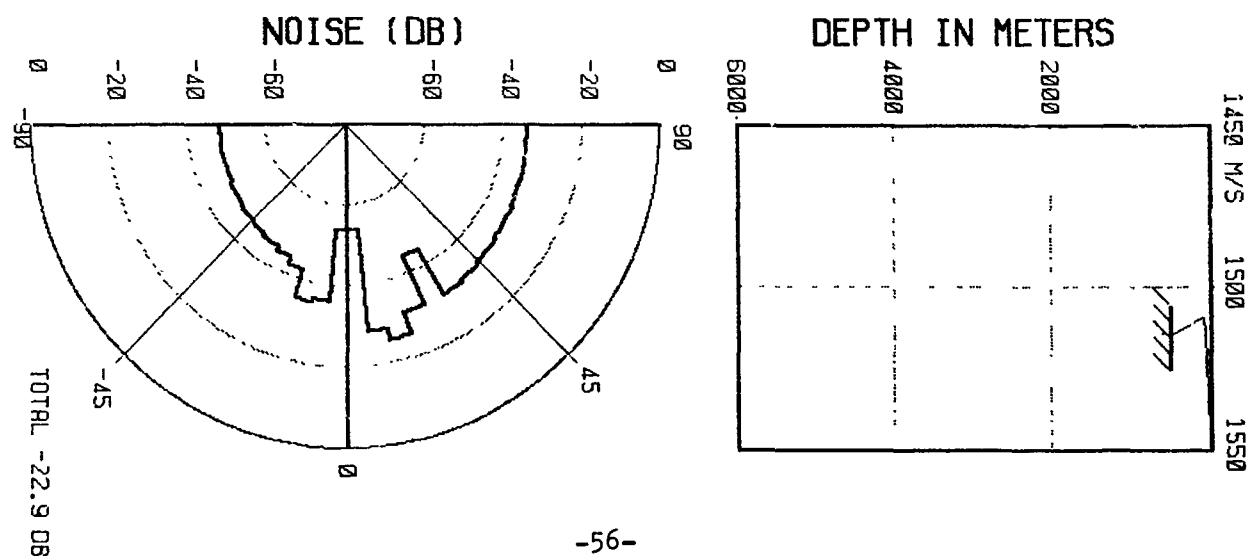
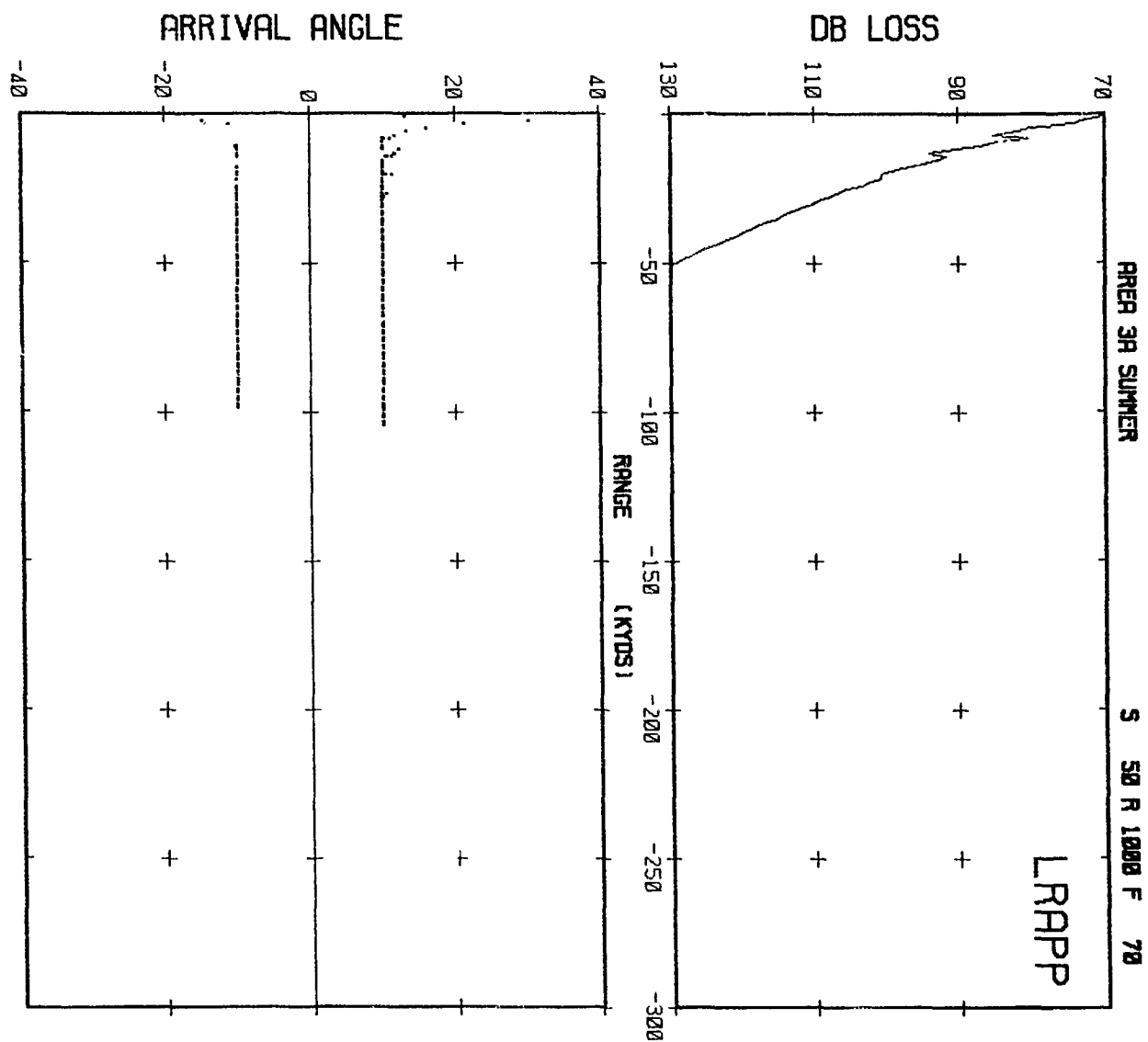


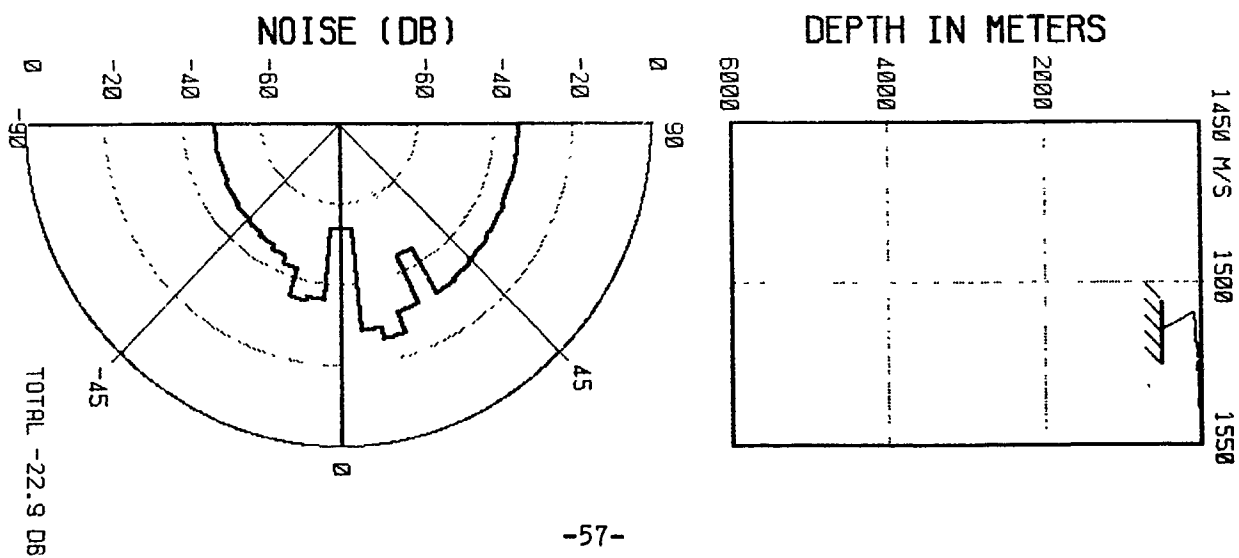
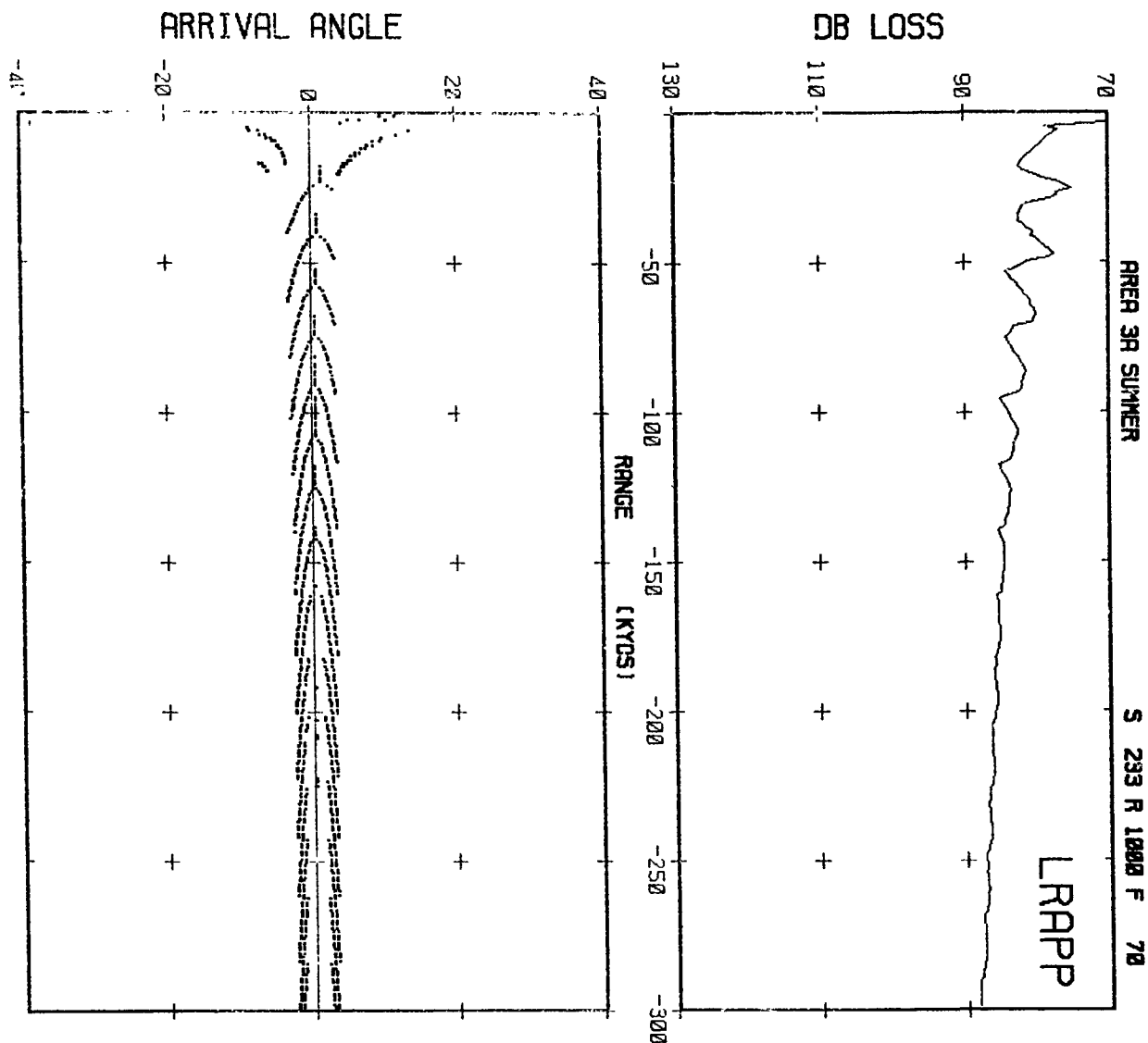
DEPTH IN METERS

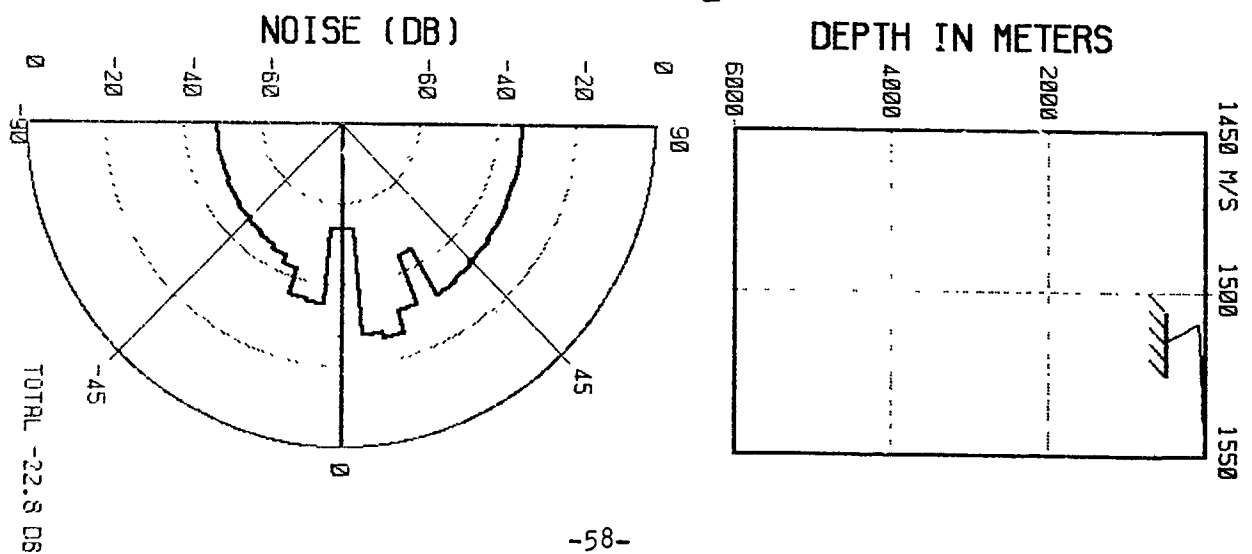
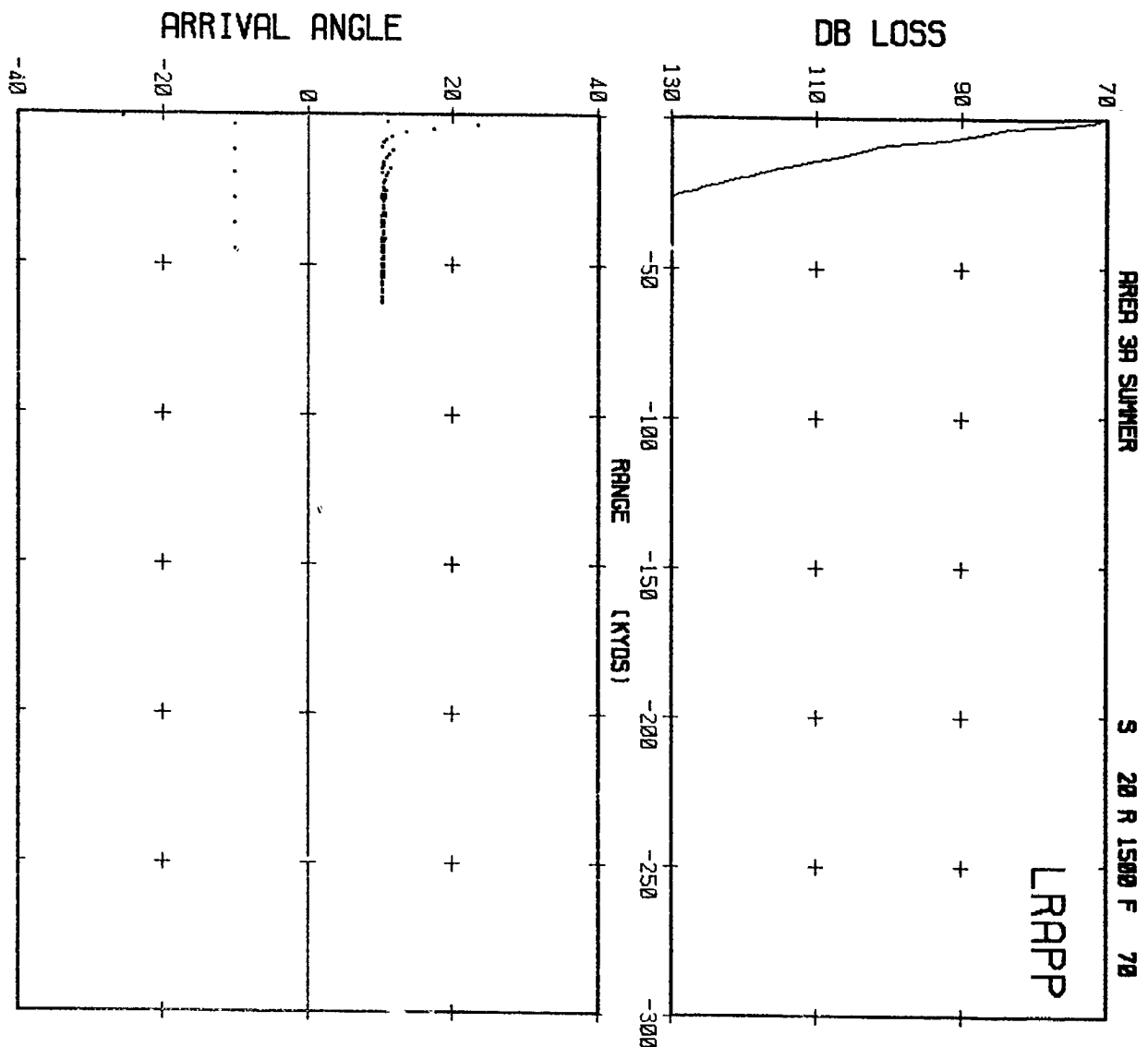


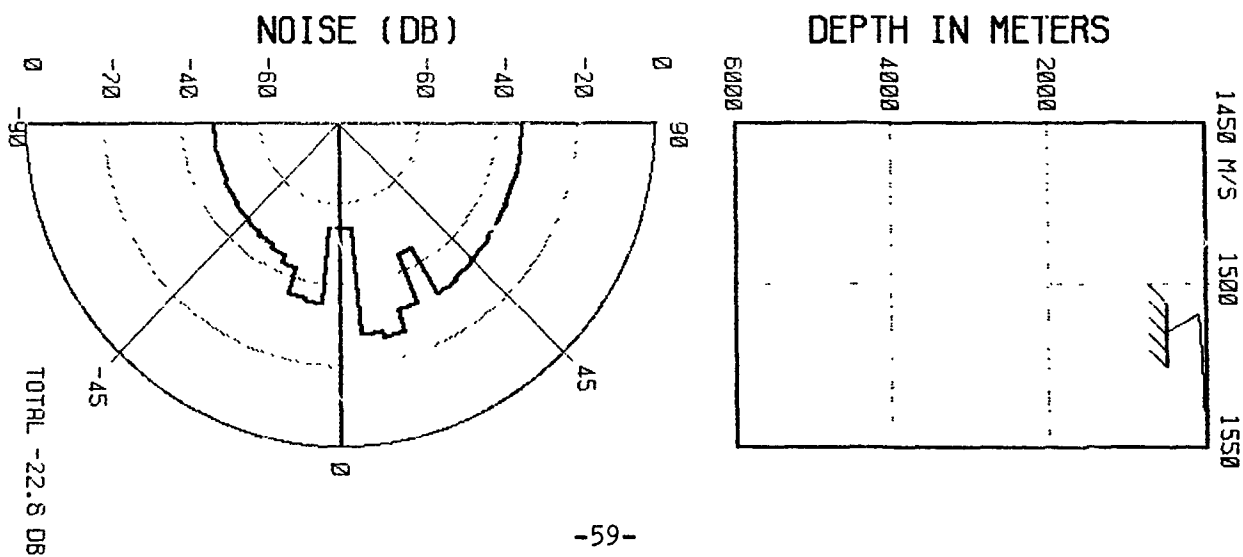
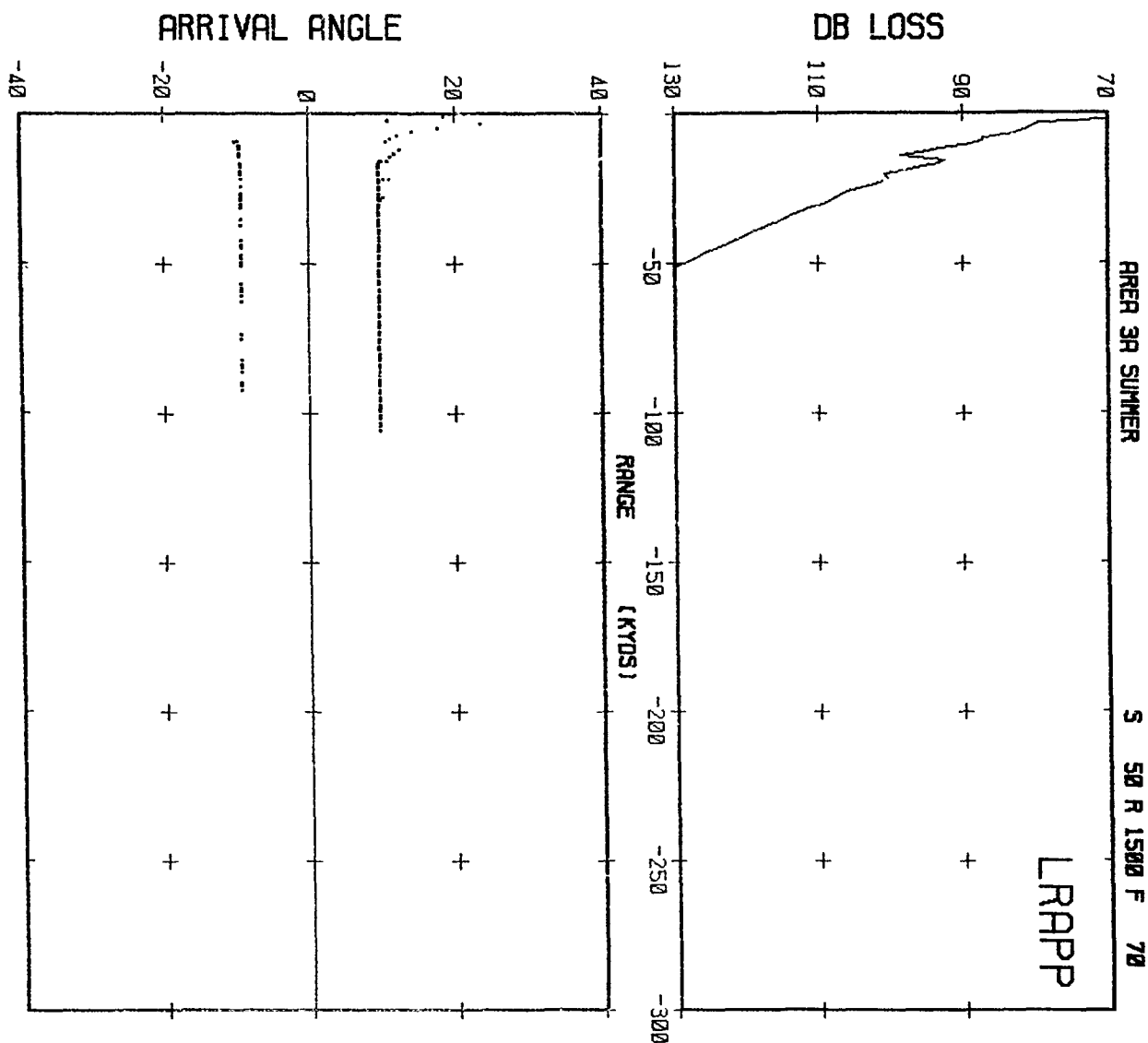
NOISE (DB)









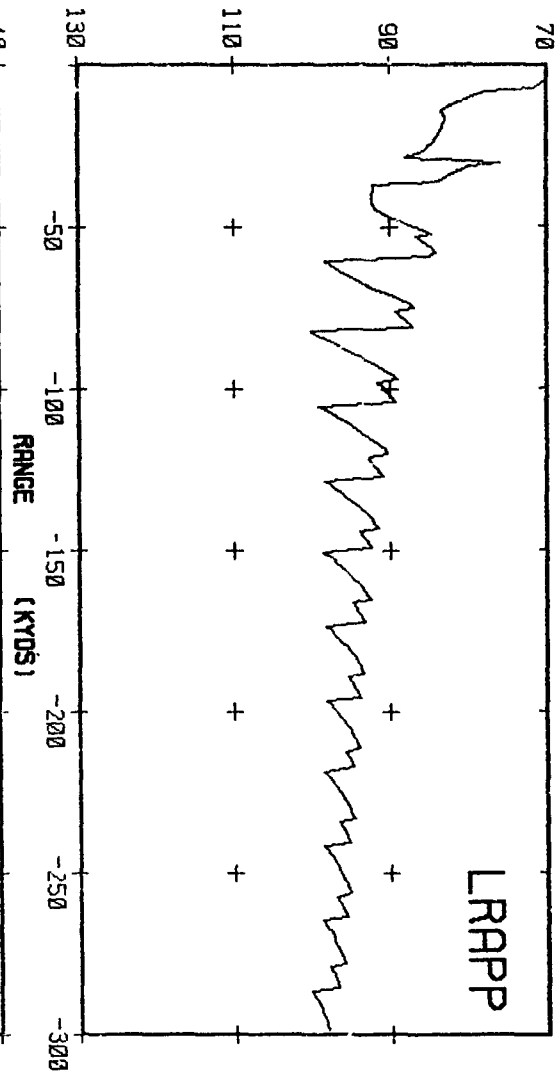


AREA 3R SUMMER

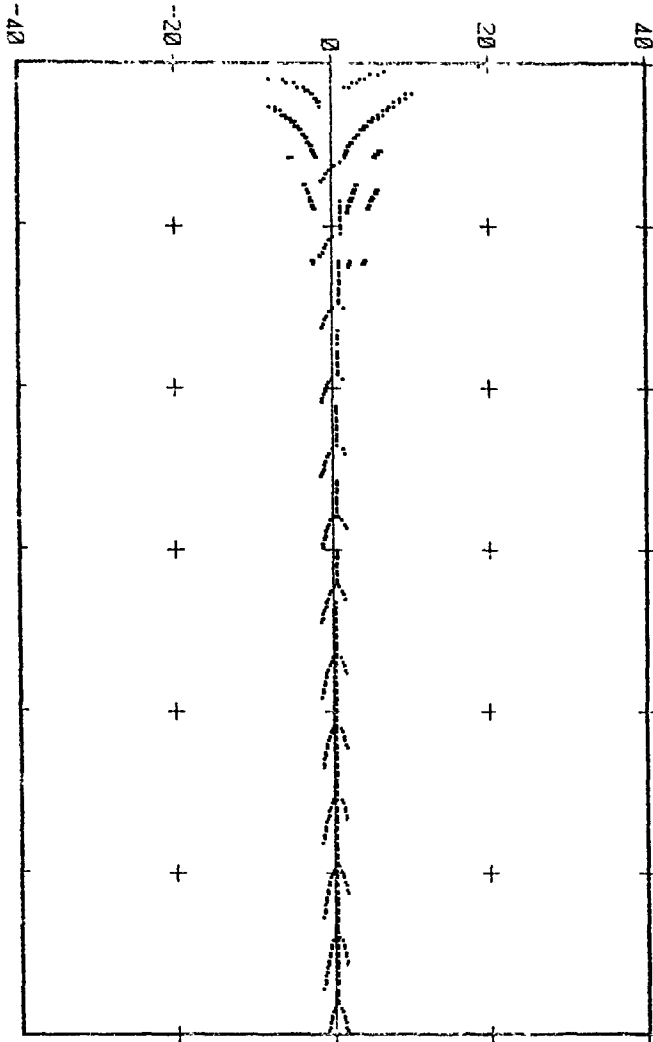
S 293 R 1500 F 70

1450 M/S 1500 1550

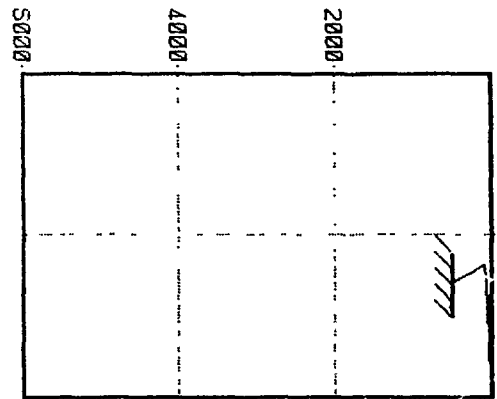
DB LOSS



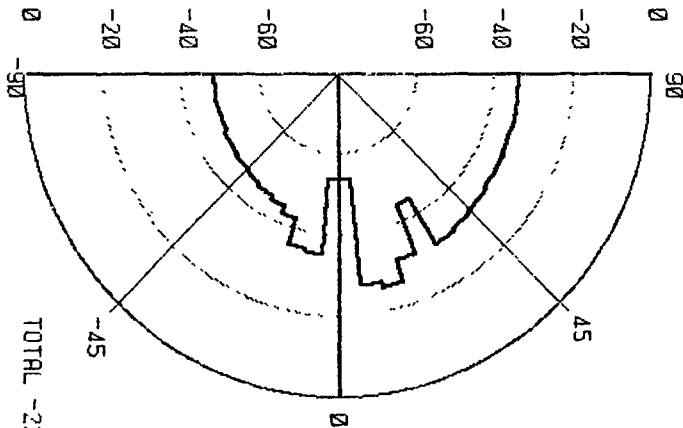
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



TOTAL -22.8 DB

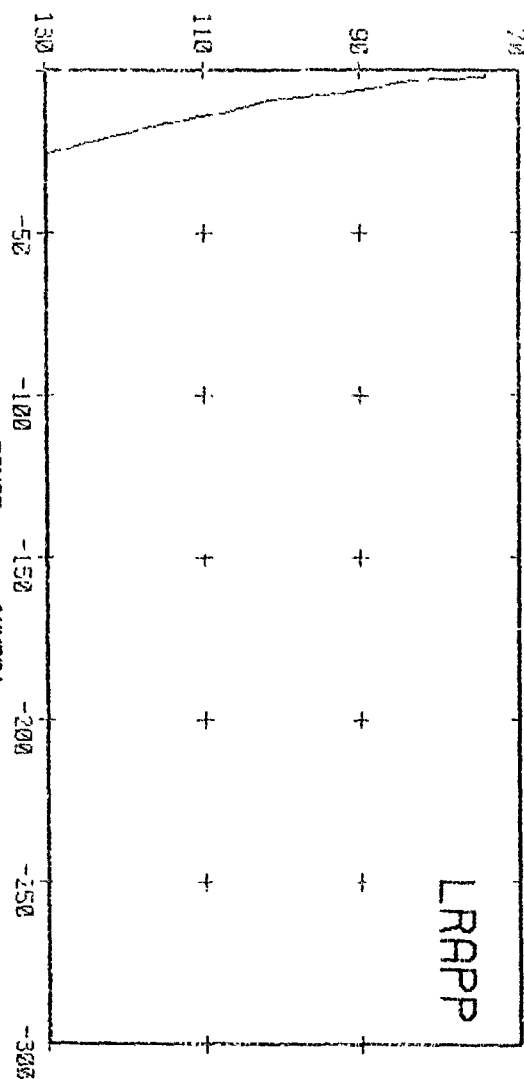
AREA 3A SUMMER

S 20 R 1640 F 70

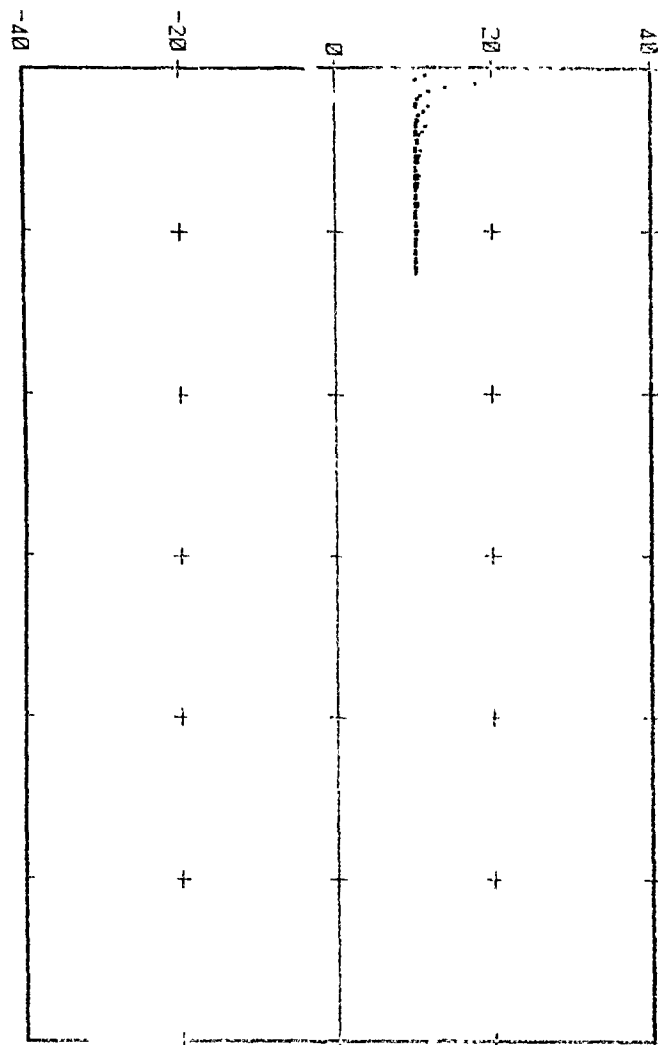
1450 M/S 1500

1550

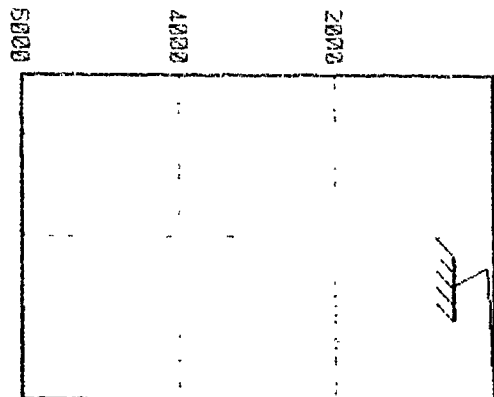
DB LOSS



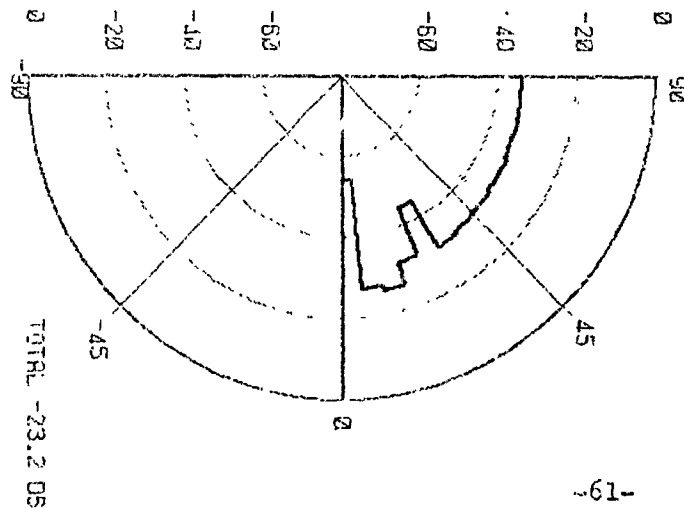
ARRIVAL ANGLE

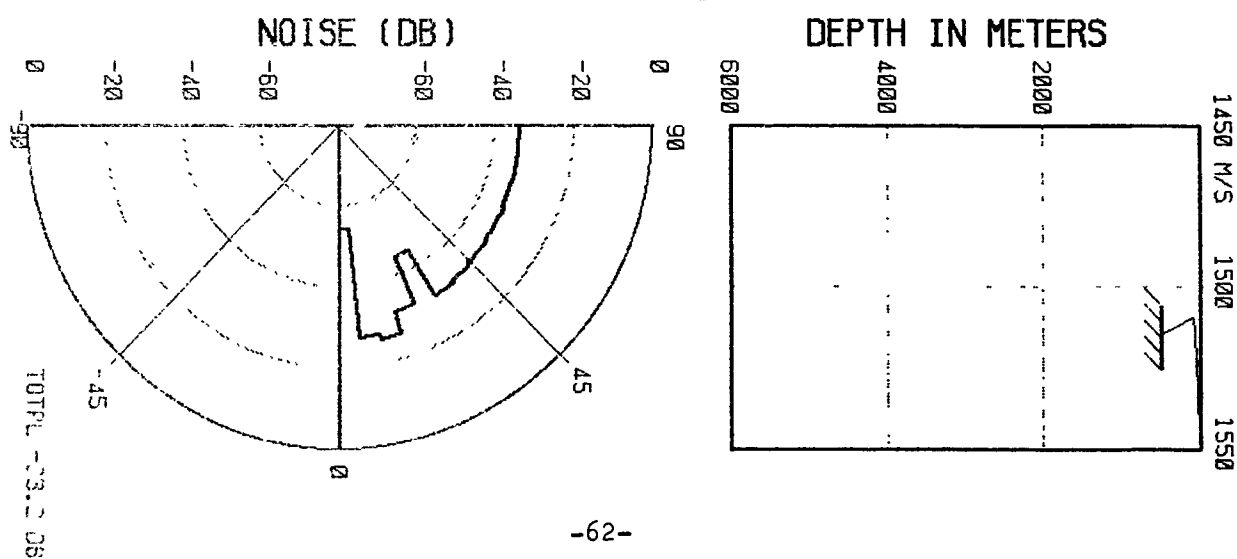
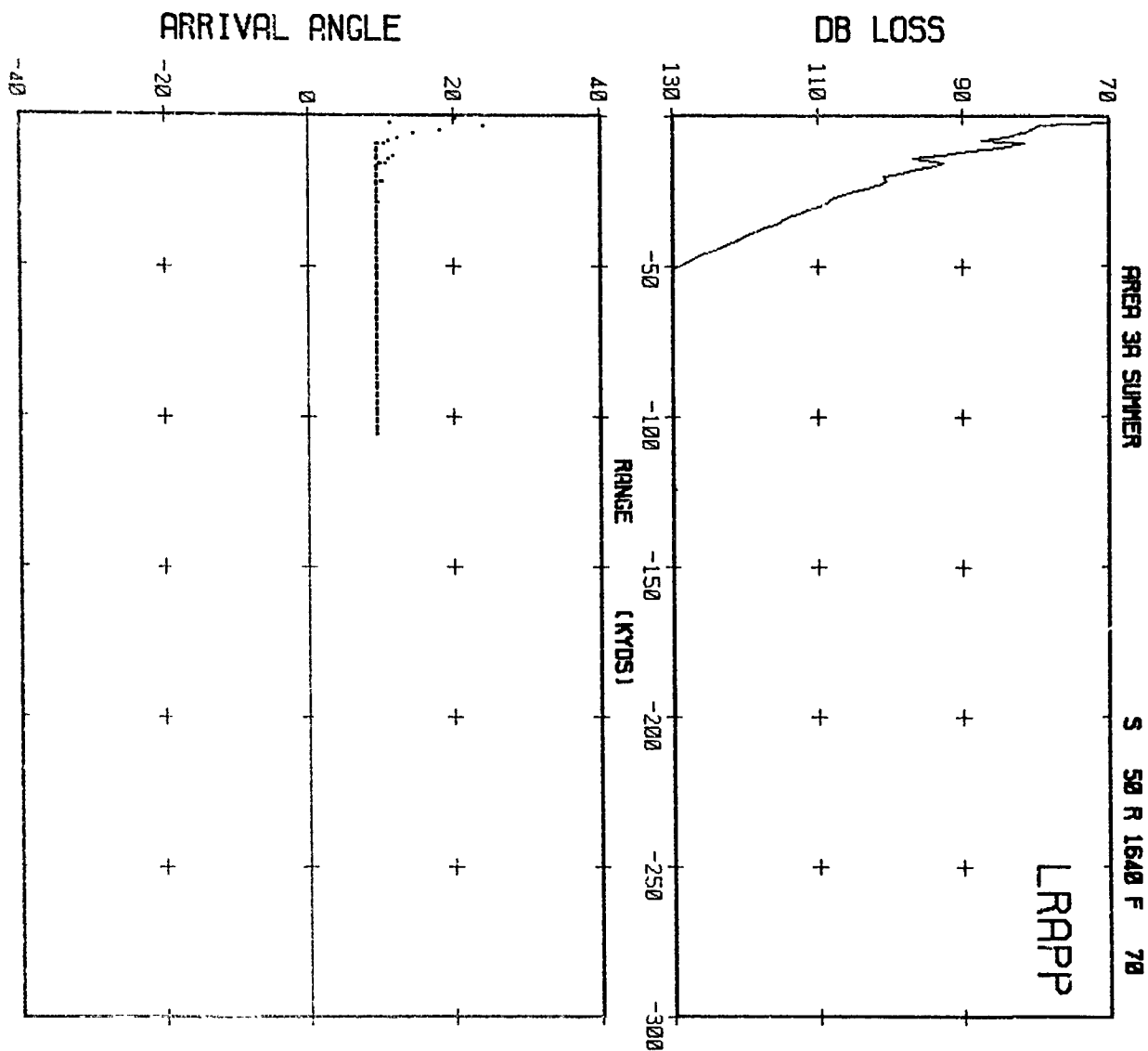


DEPTH IN METERS



NOISE (DB)



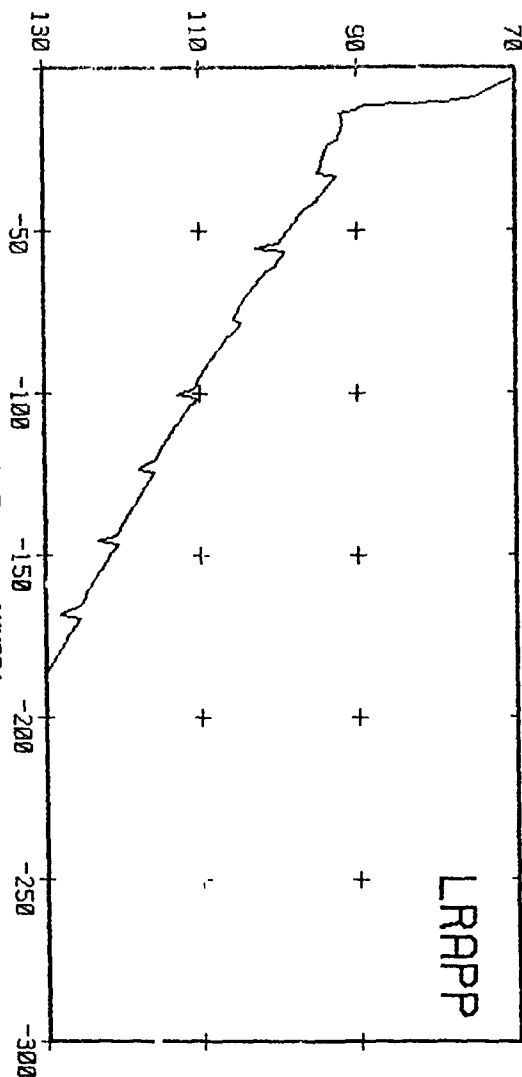


RRR 3R SUMMER

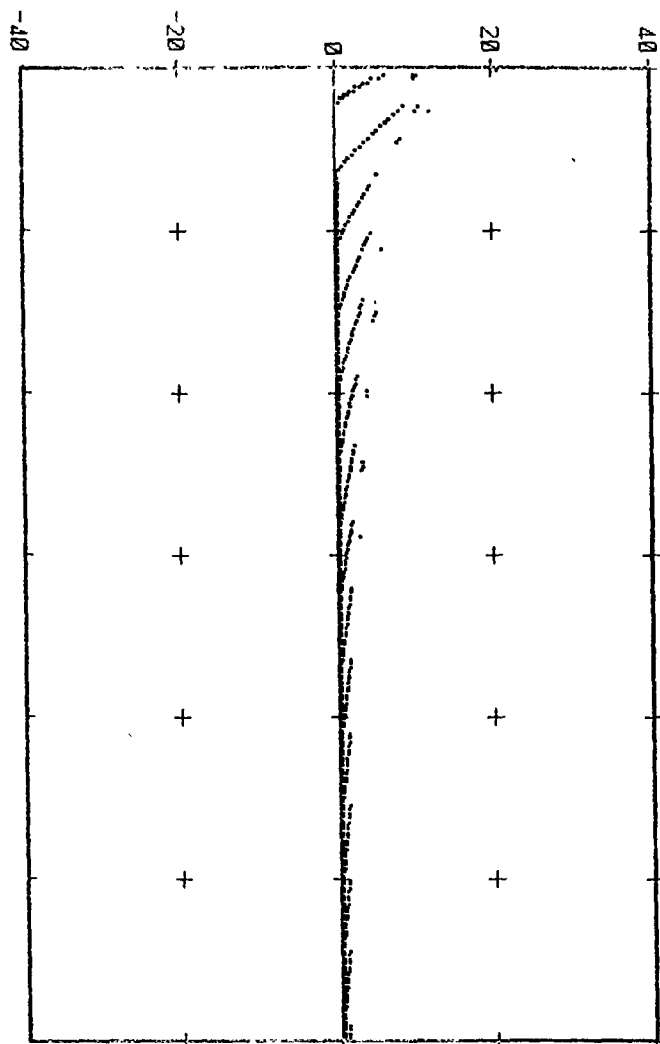
S 233 R 1640 F 70

LRAPP

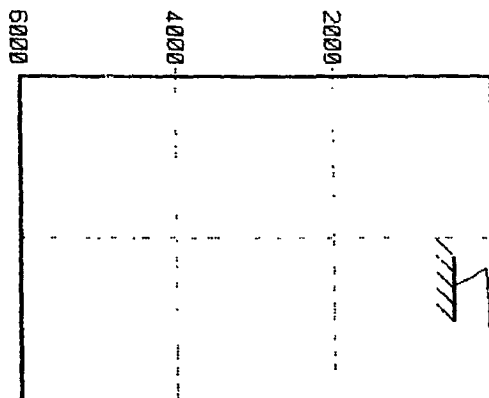
DB LOSS



ARRIVAL ANGLE

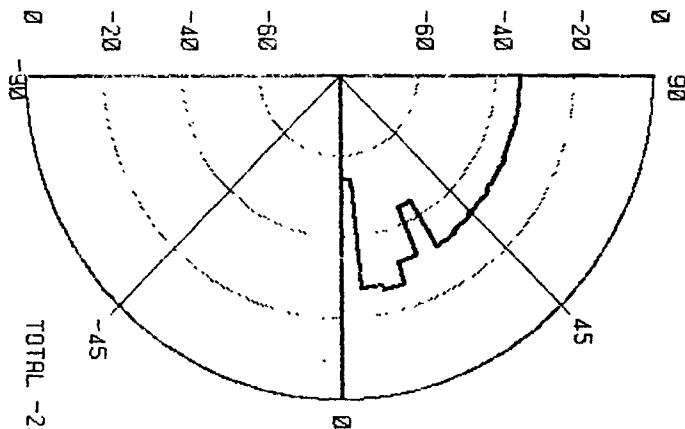


DEPTH IN METERS

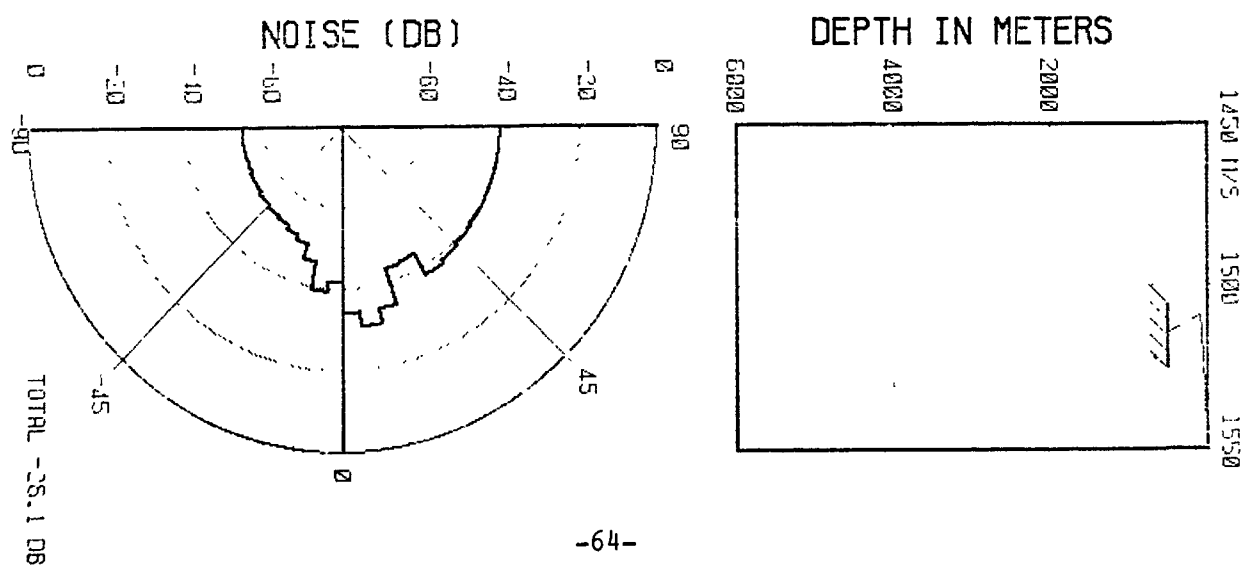
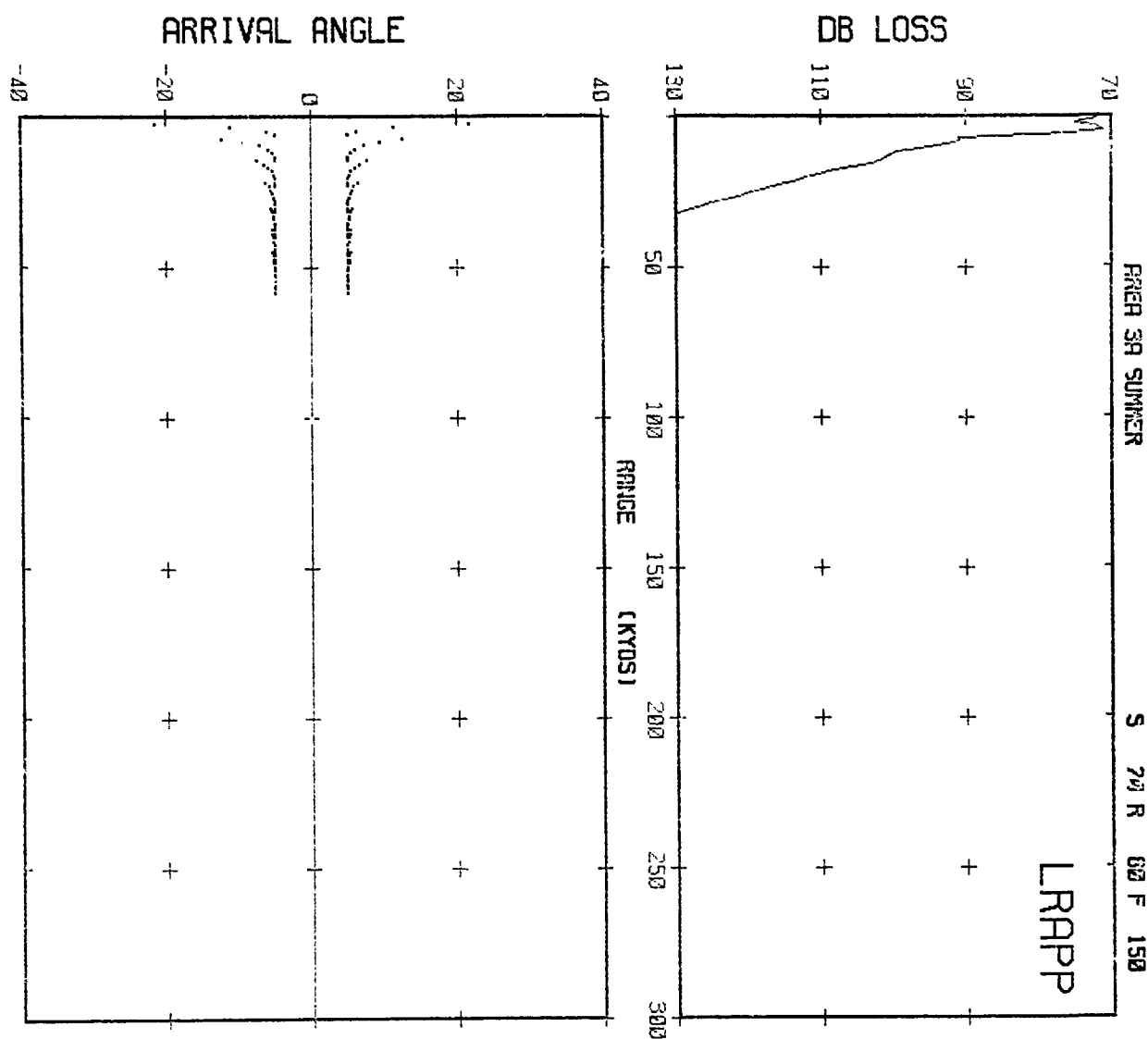


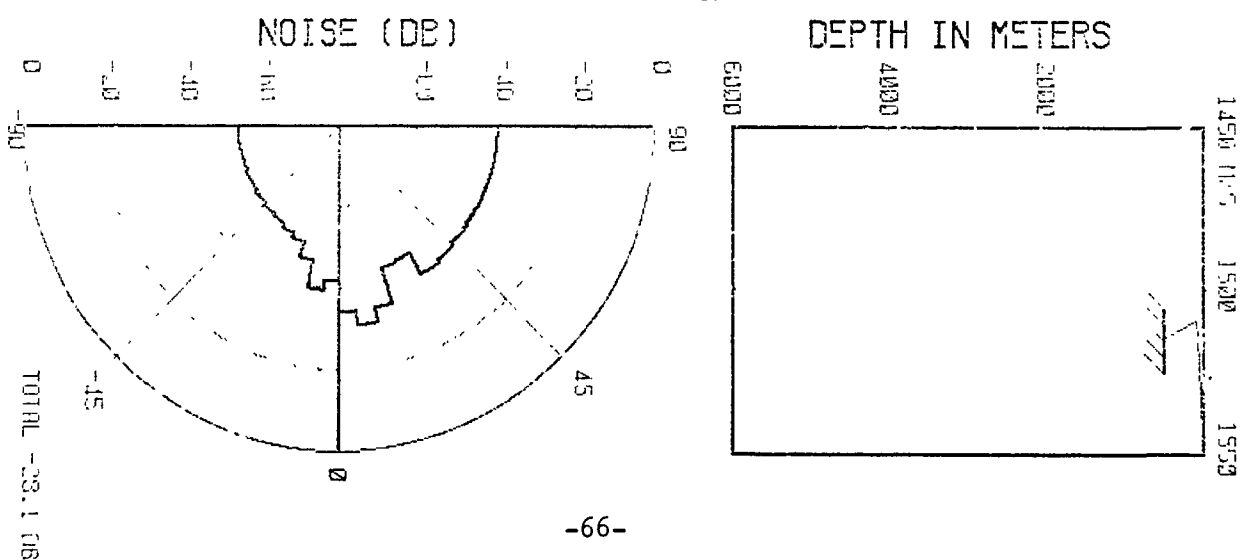
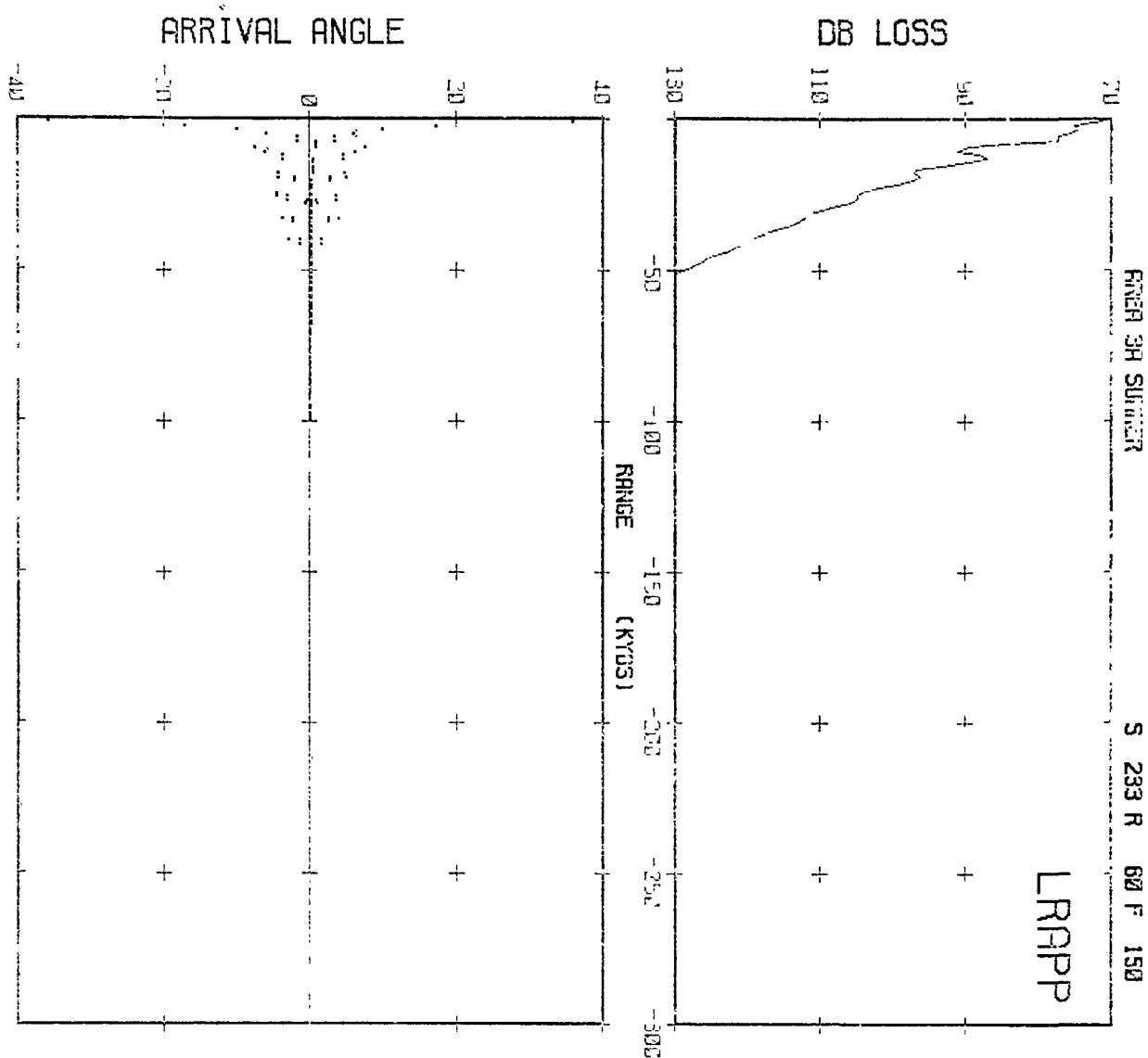
1450 M/S 1500 1550

NOISE (DB)



TOTAL -23.2 DB



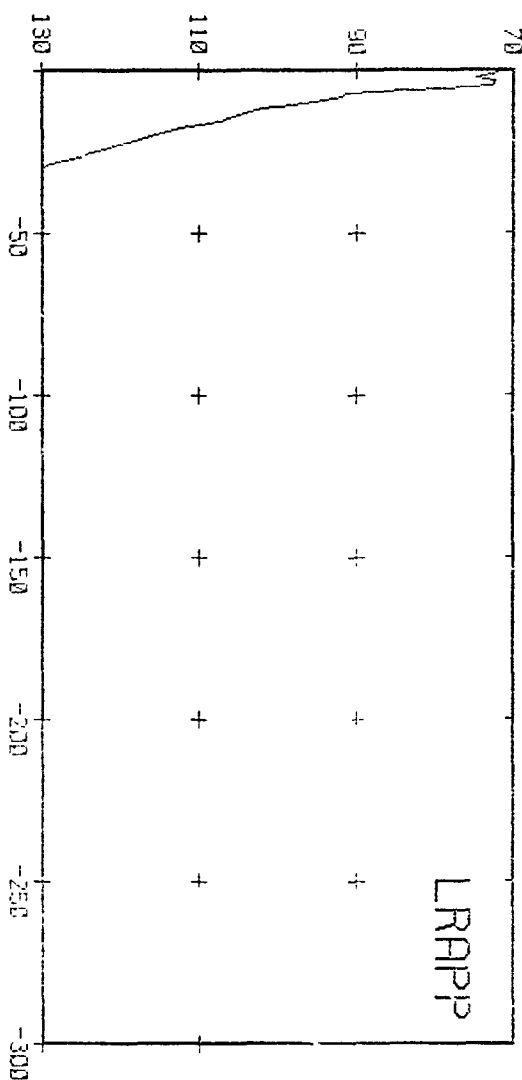


ARER 3A SUTTER

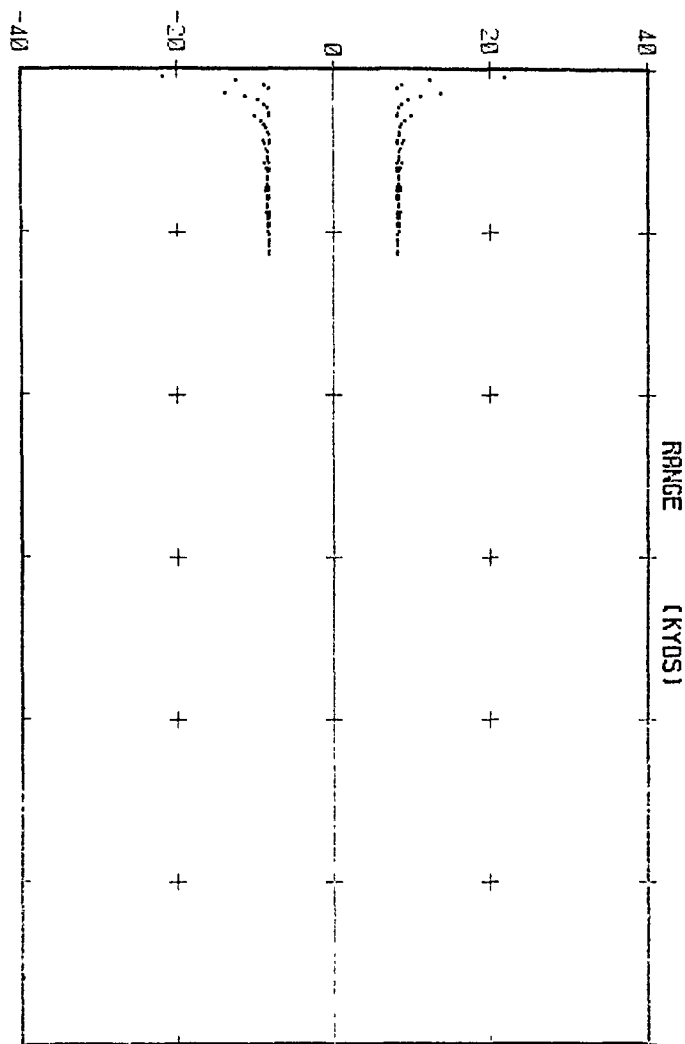
S 20 R 133 F 150

1450 14.5 1500 1550

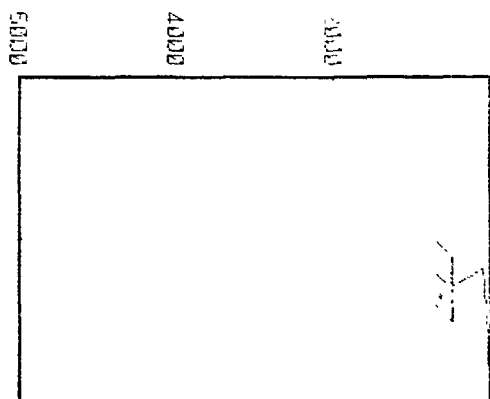
DB LOSS



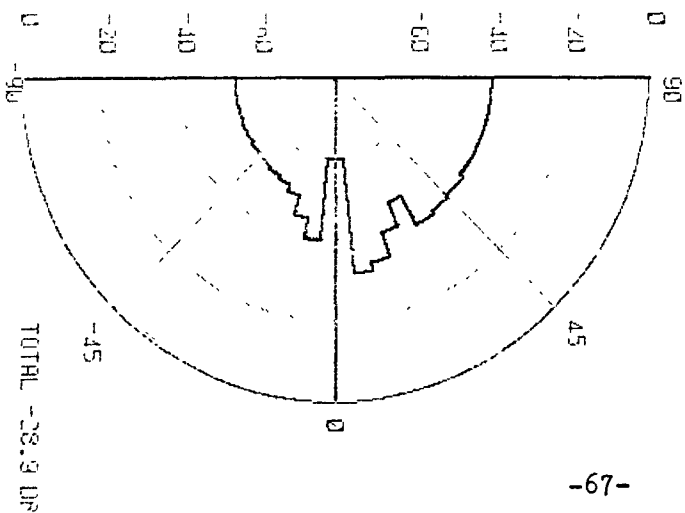
ARRIVAL ANGLE

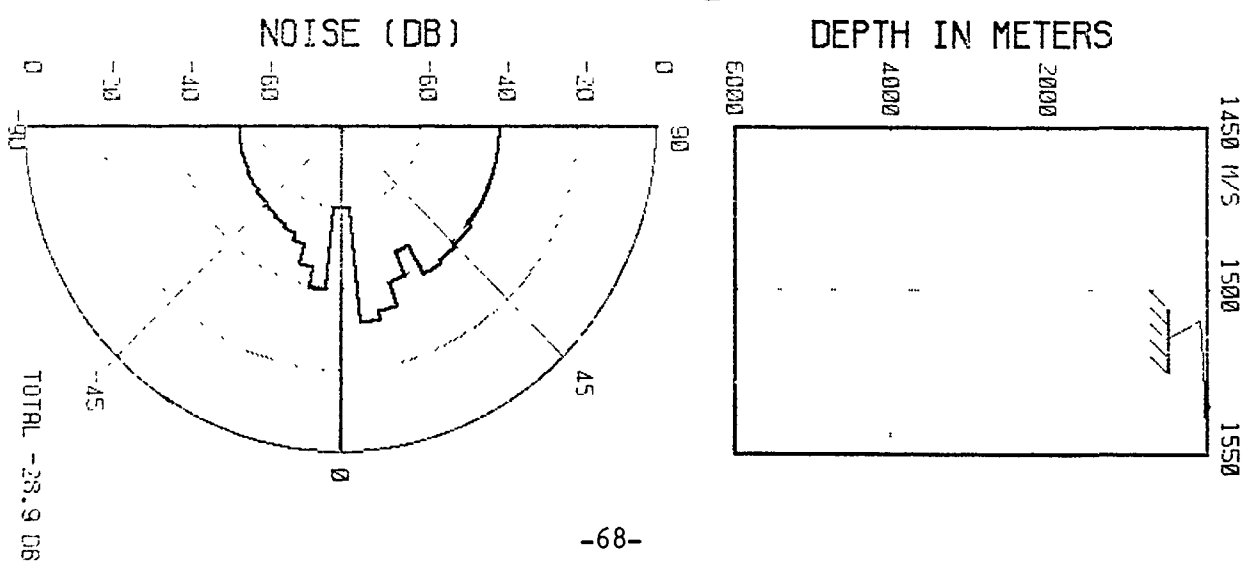
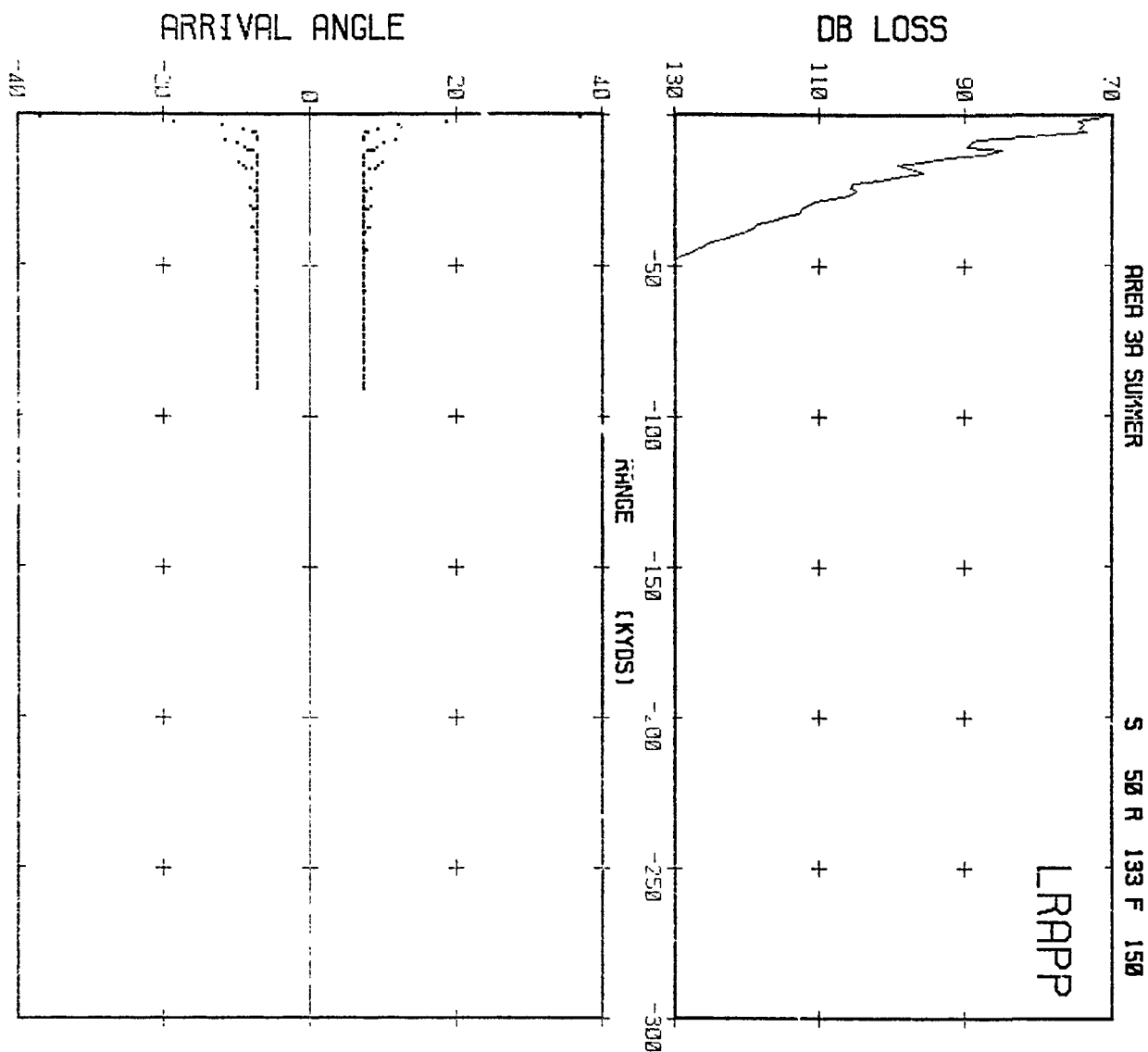


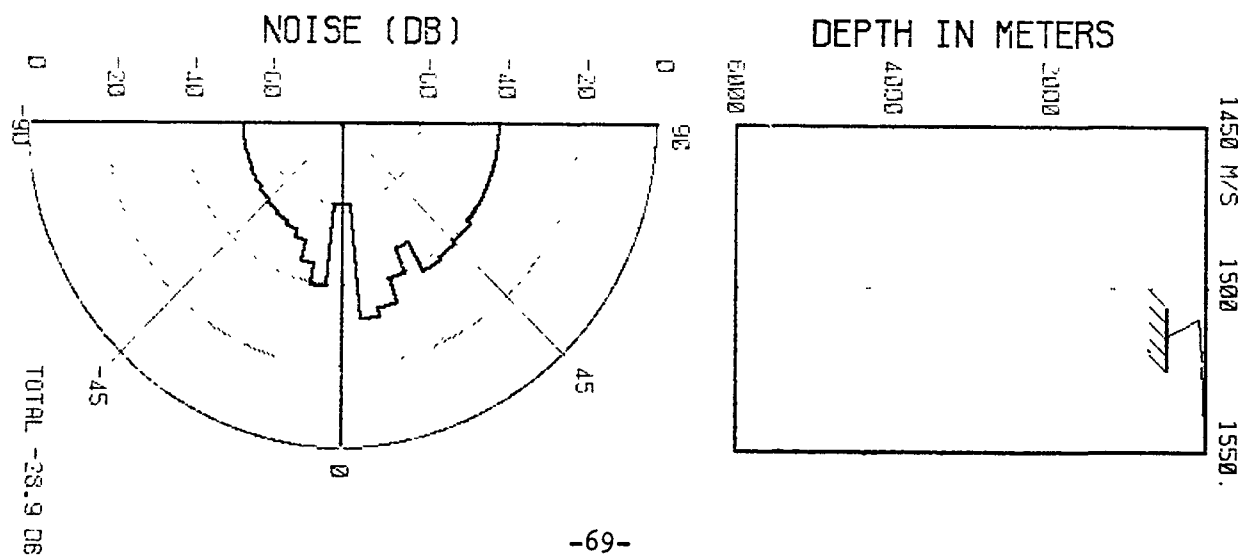
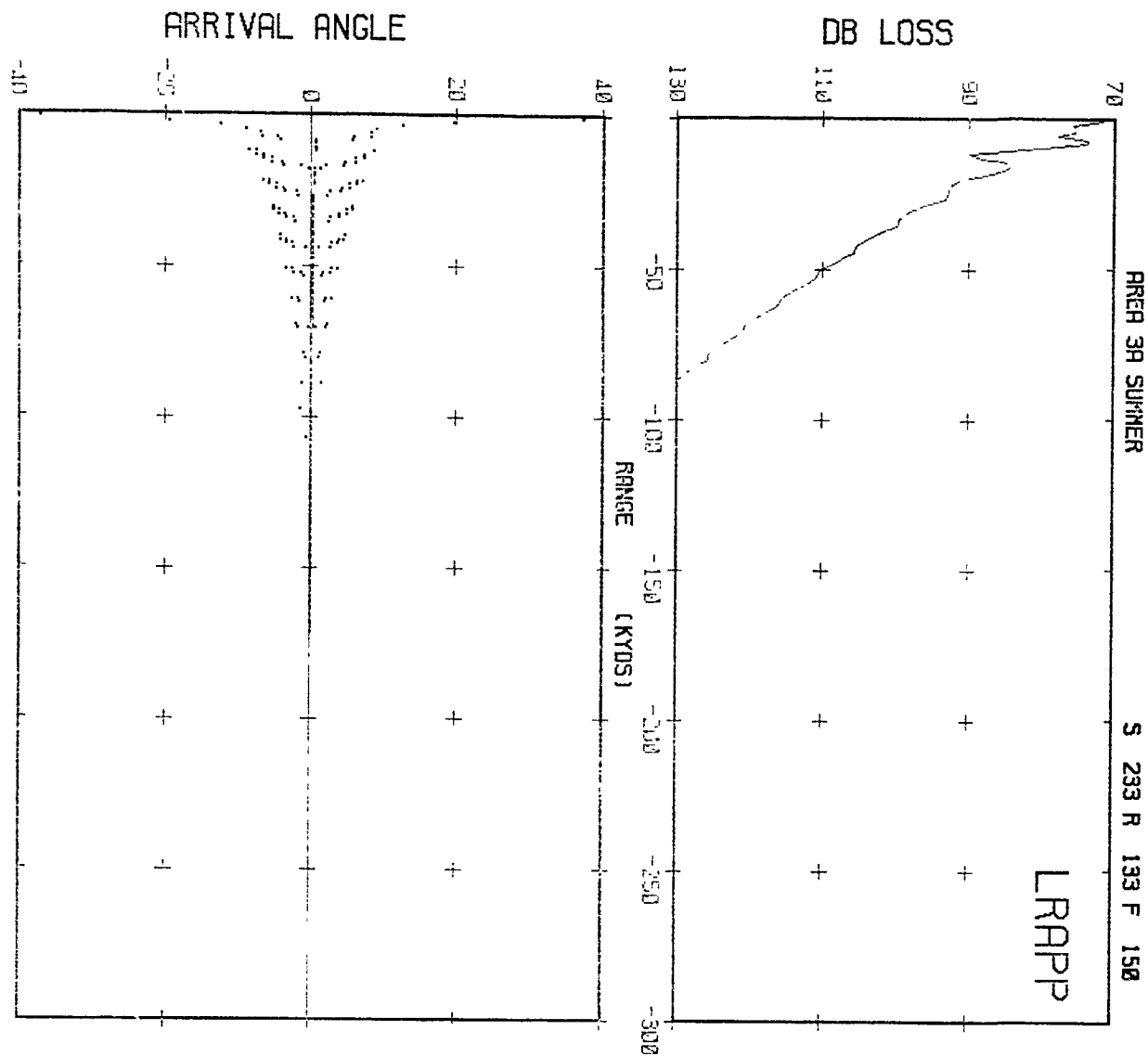
DEPTH IN METERS



NOISE (DB)







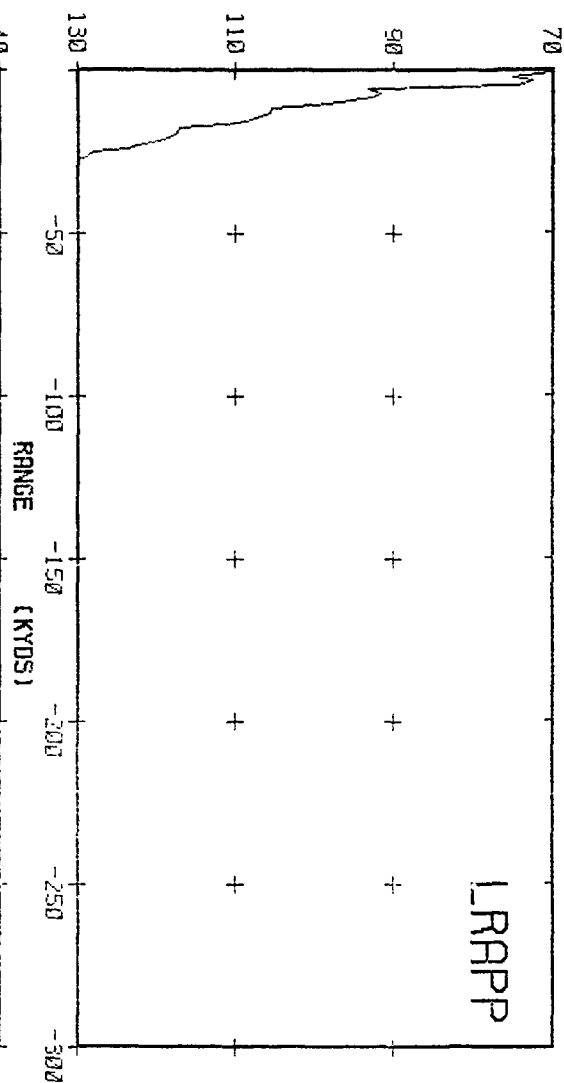
AREA 3A SUMMER

S 20 R 262 F 150

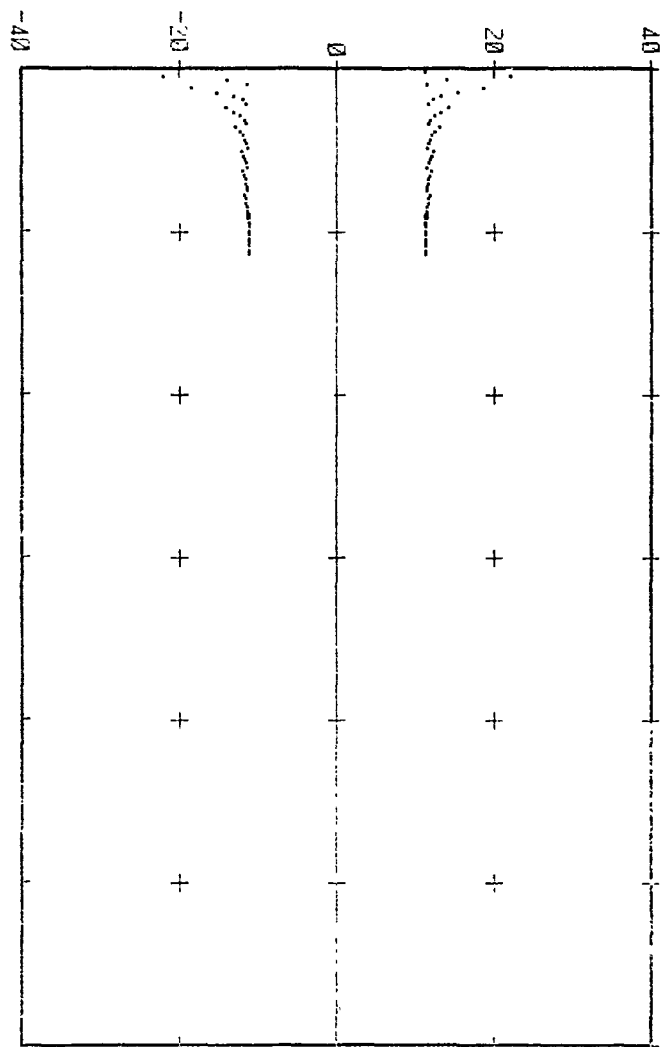
1450 M/S 1500

1550

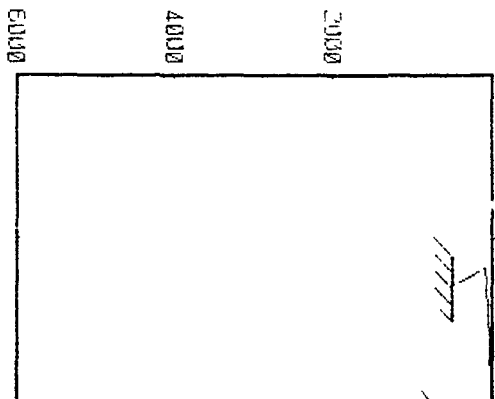
DB LOSS



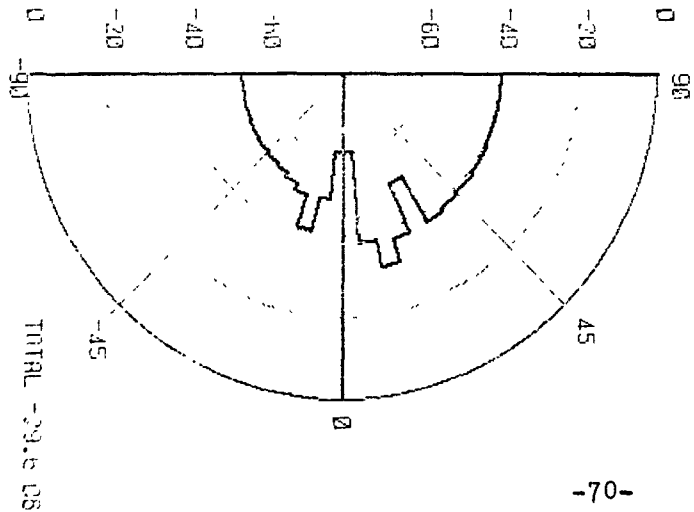
ARRIVAL ANGLE

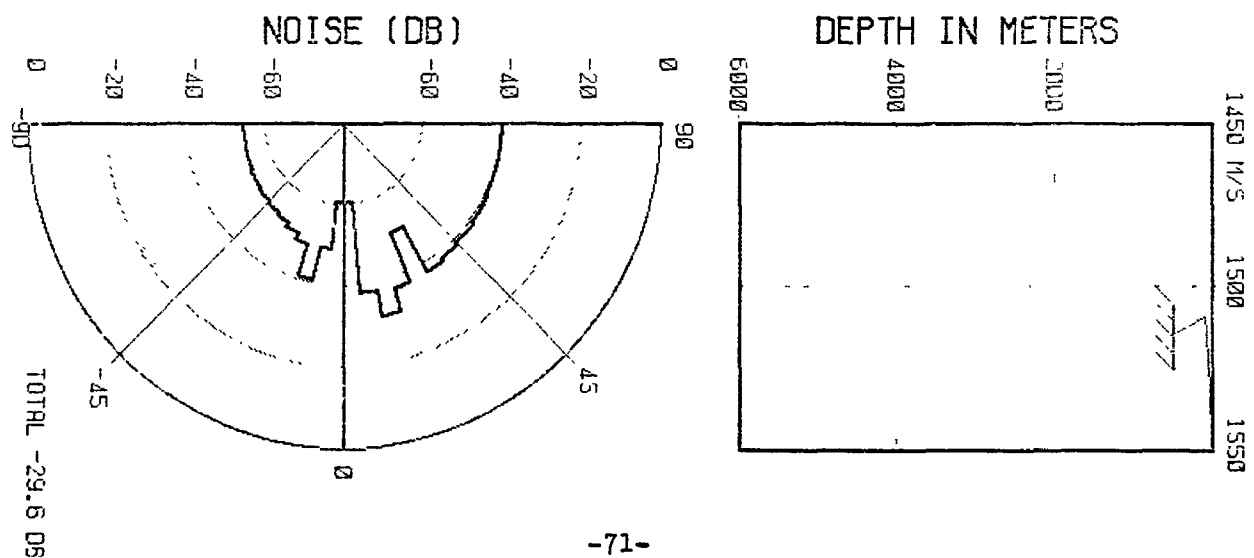
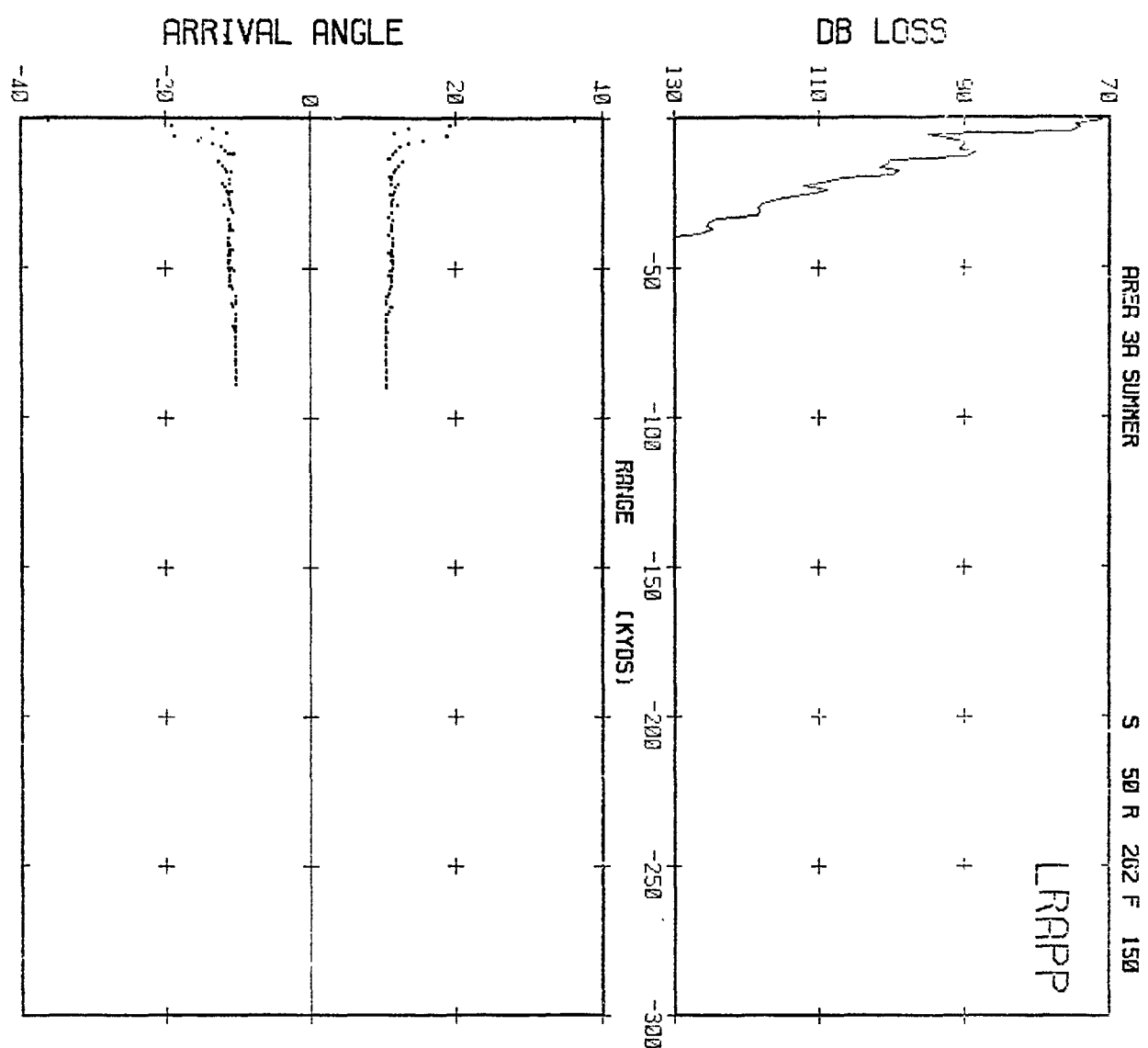


DEPTH IN METERS



NOISE (DB)



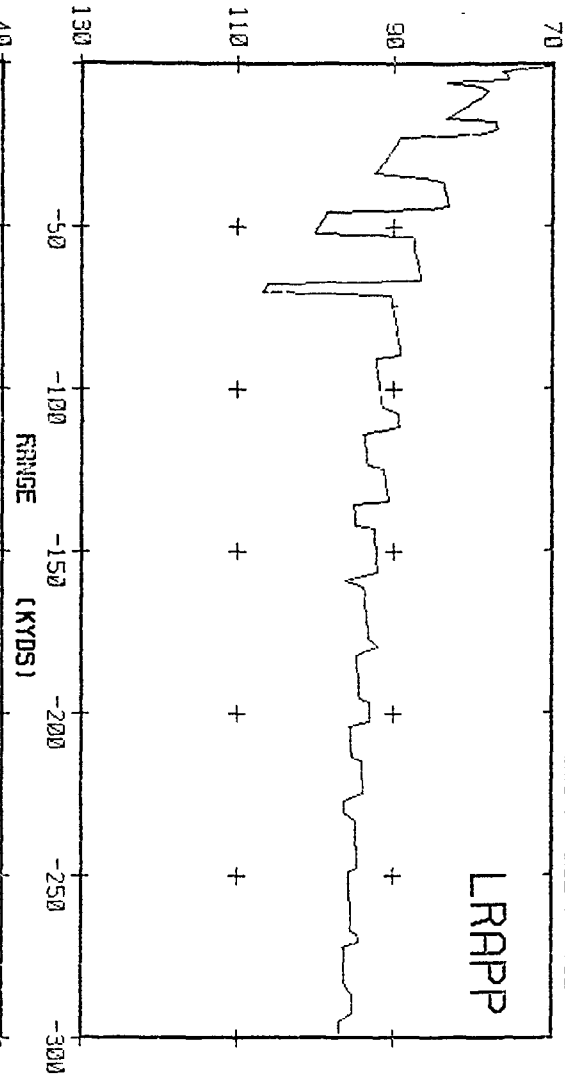


AREA 3A SUMNER

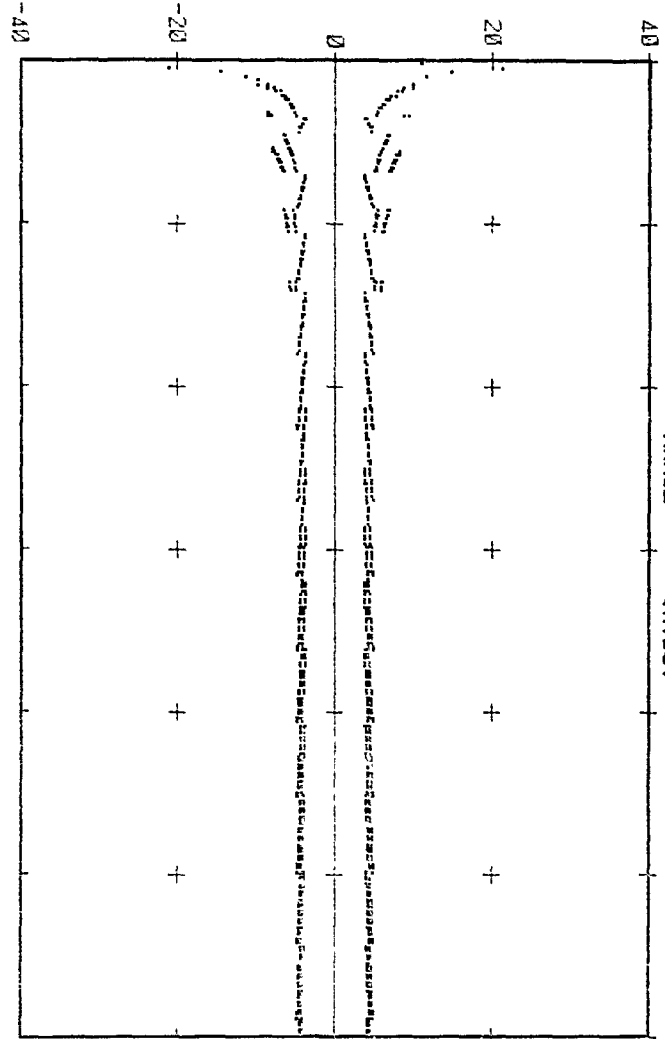
S 233 R 262 F 150

1450 M/S 1500 1550

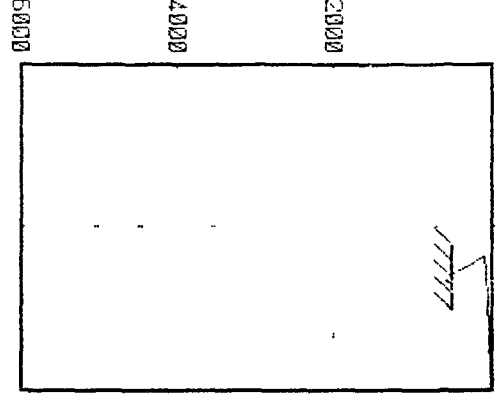
DB LOSS



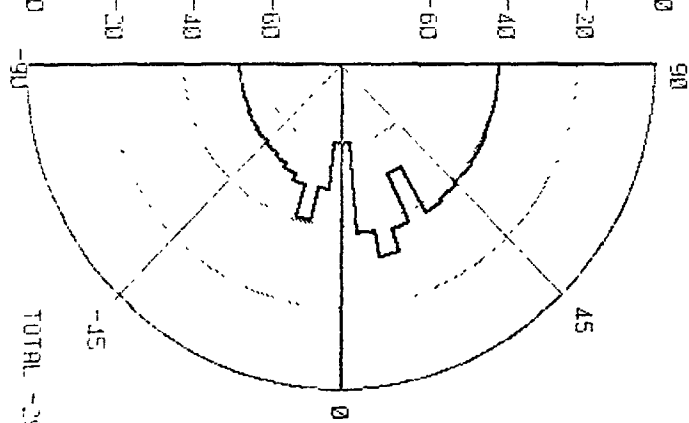
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



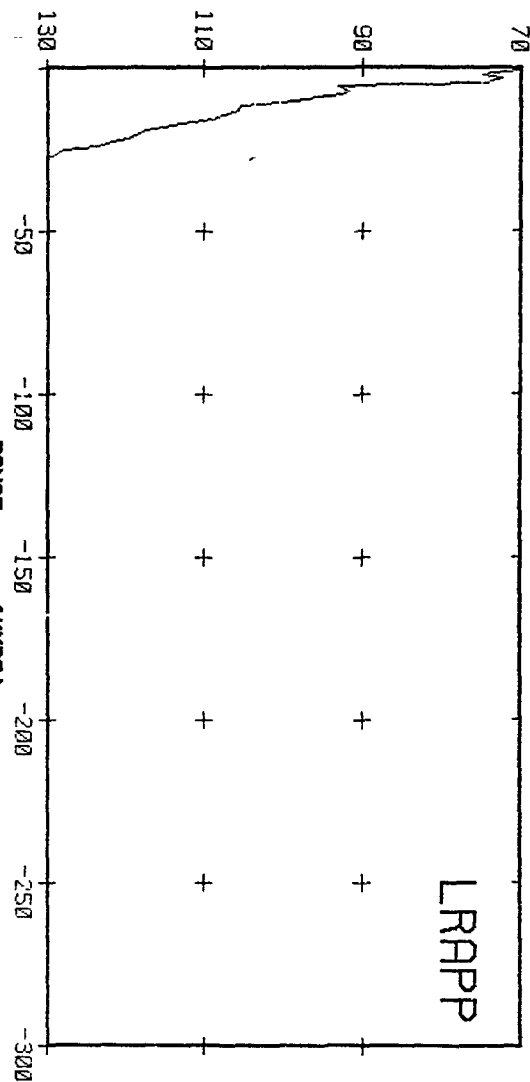
TOTAL -29.5 J6

AREA 3A SUMNER

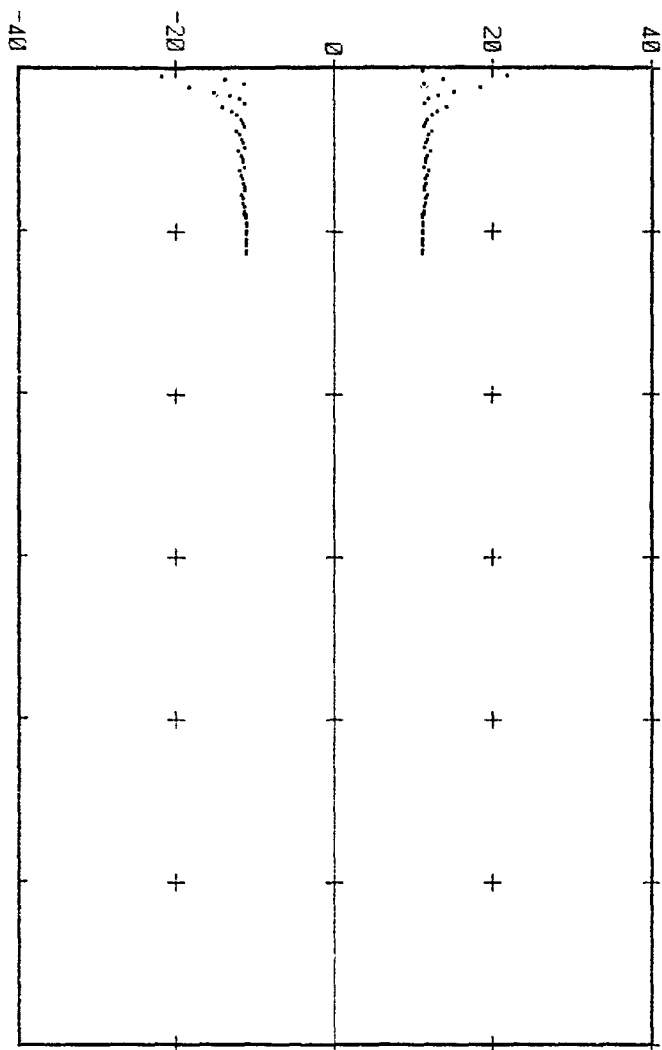
S 20 R 300 F 150

1450 M/S 1500 1550

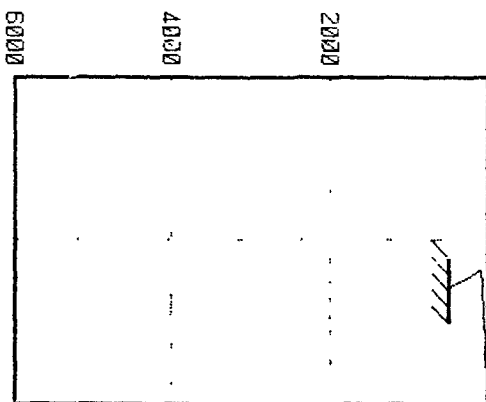
DB LOSS



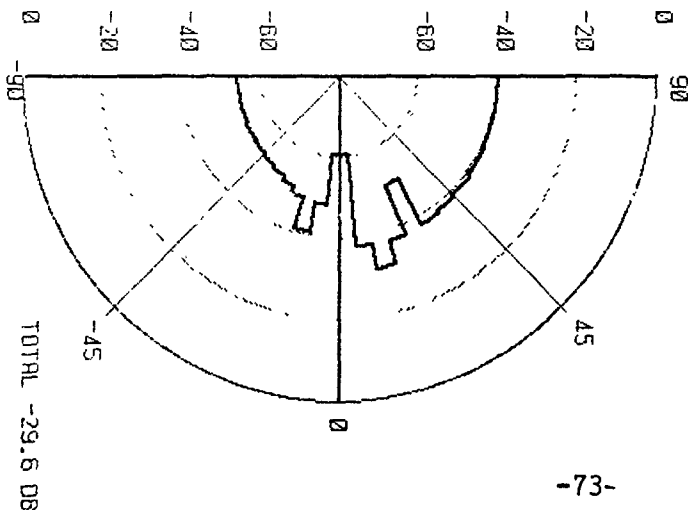
ARRIVAL ANGLE

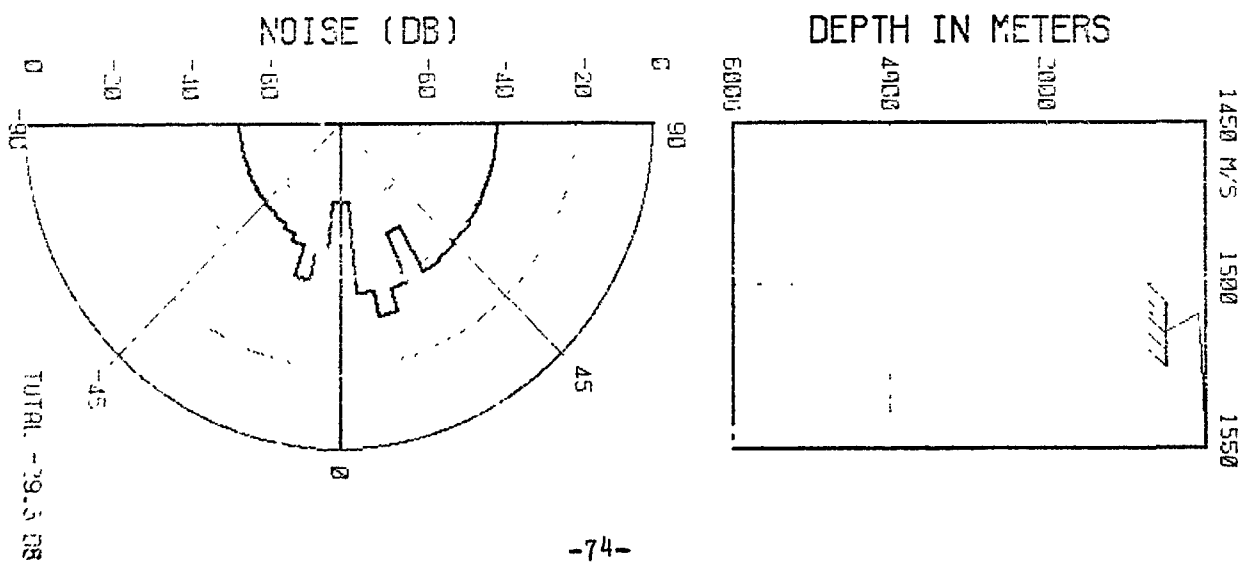
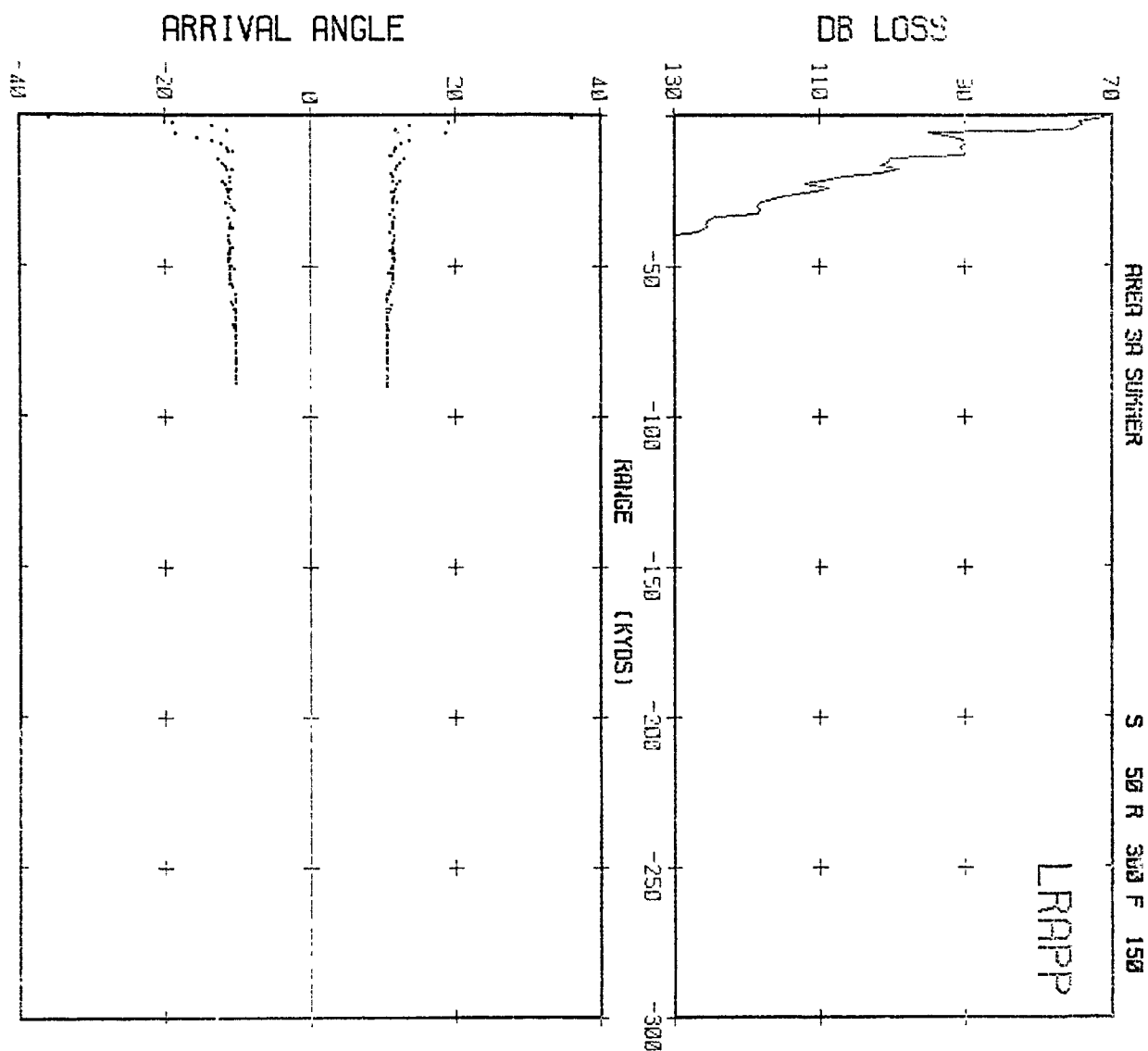


DEPTH IN METERS



NOISE (DB)





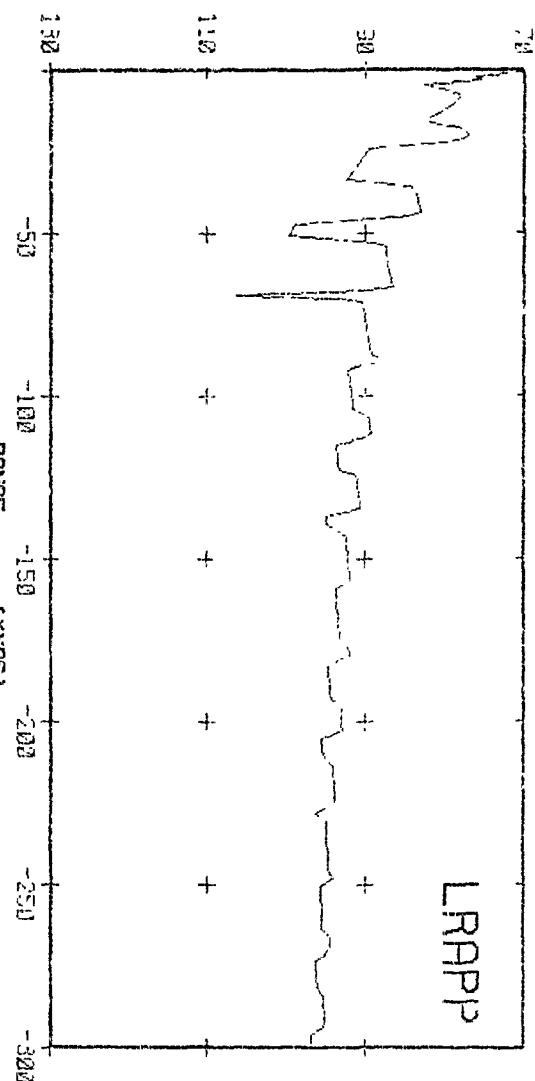
AREA 34 SUMMER

S 233 R 300 F 150

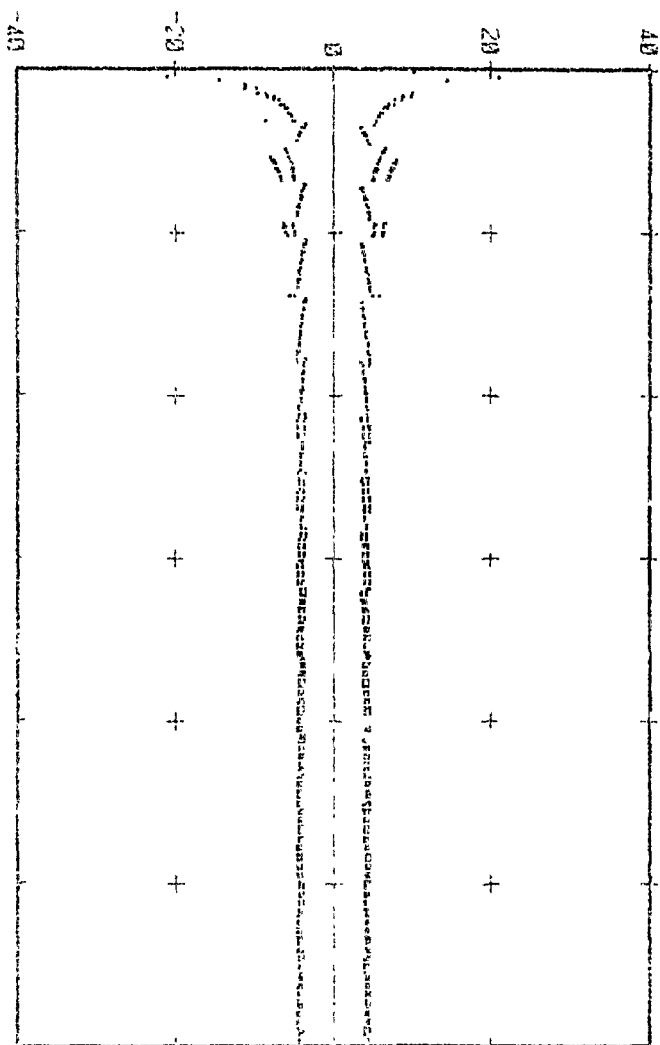
1450 1455 1500 1550

LRAPP

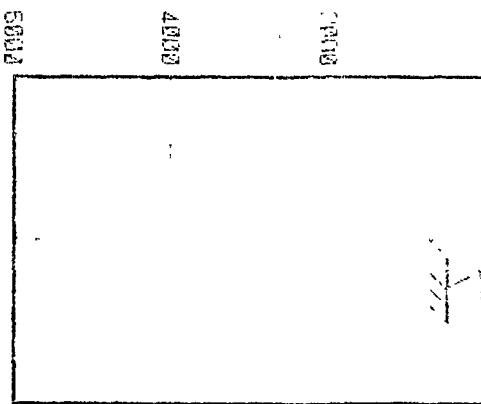
DB LOSS



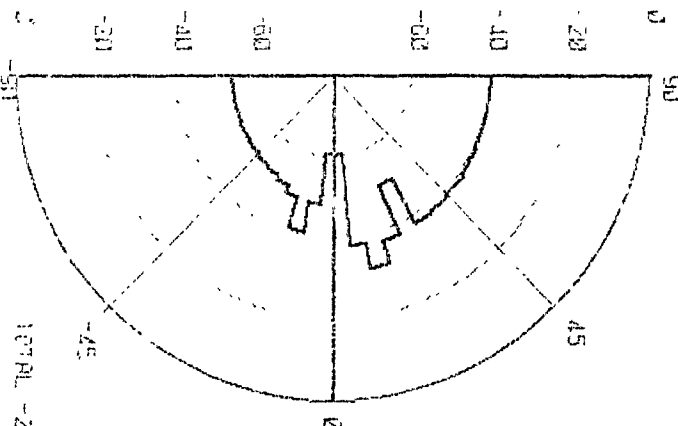
ARRIVAL ANGLE



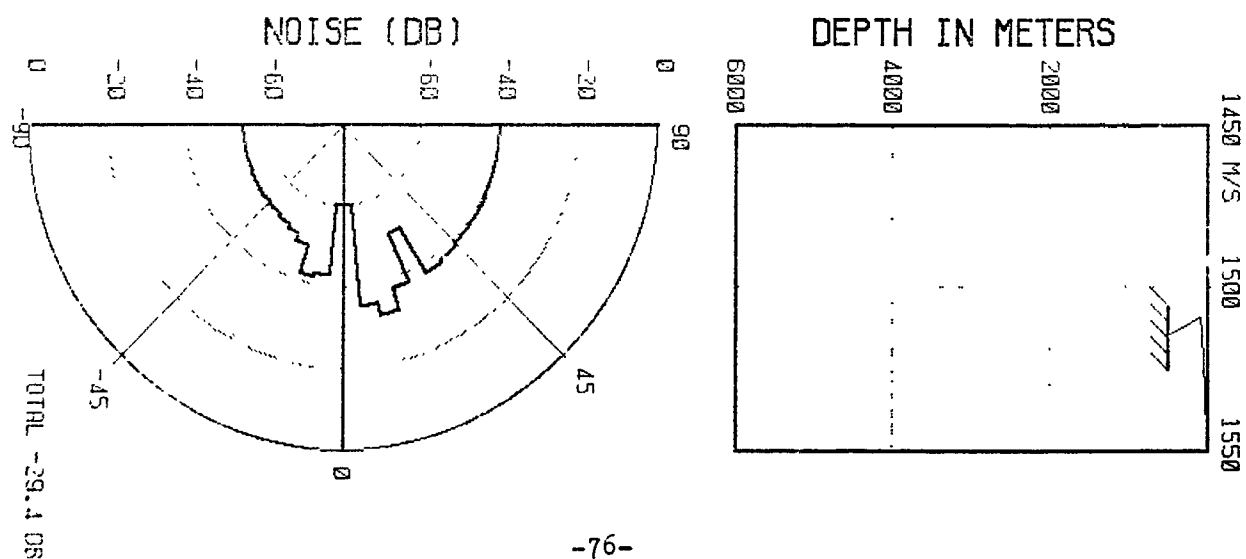
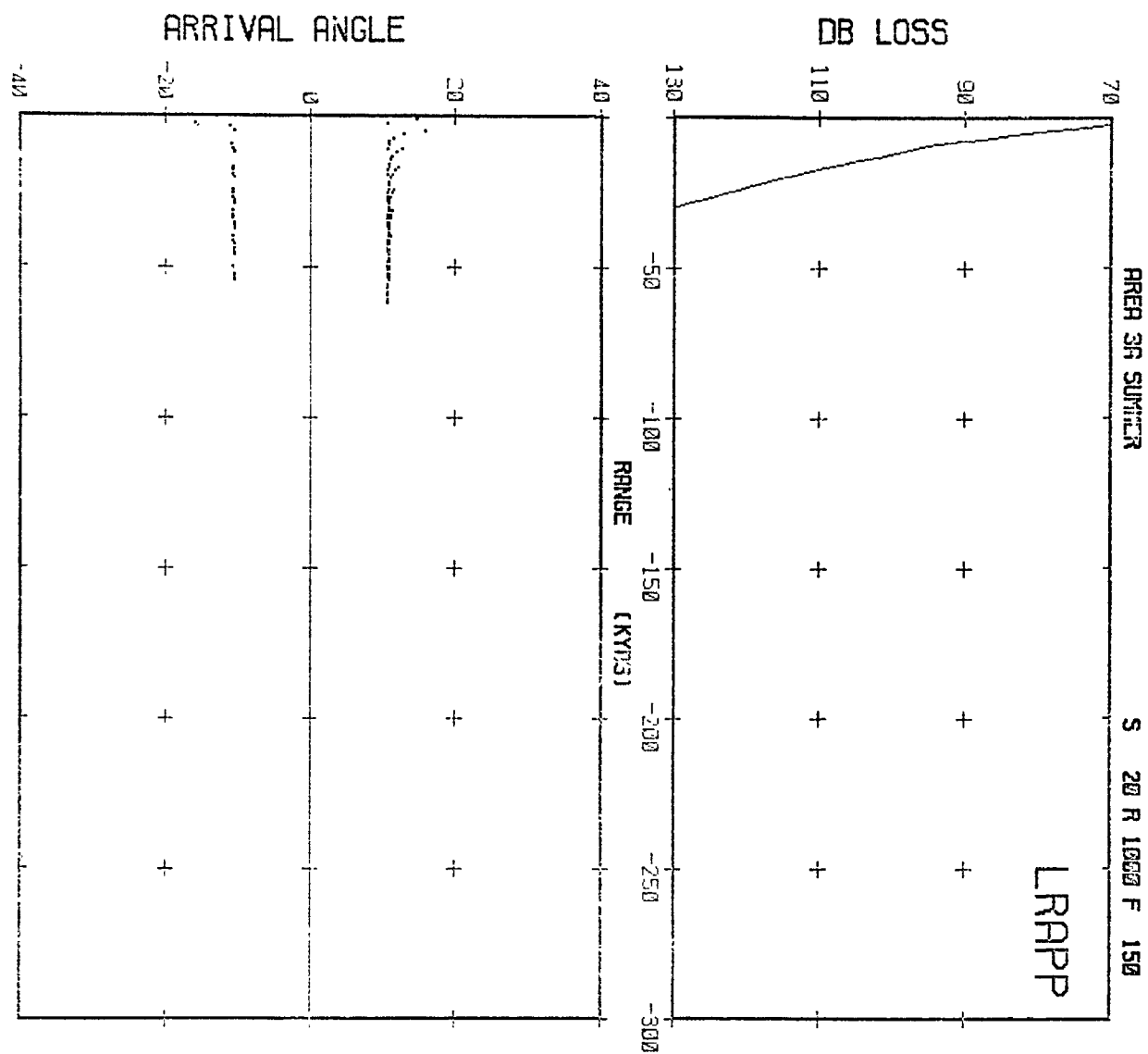
DEPTH IN METERS

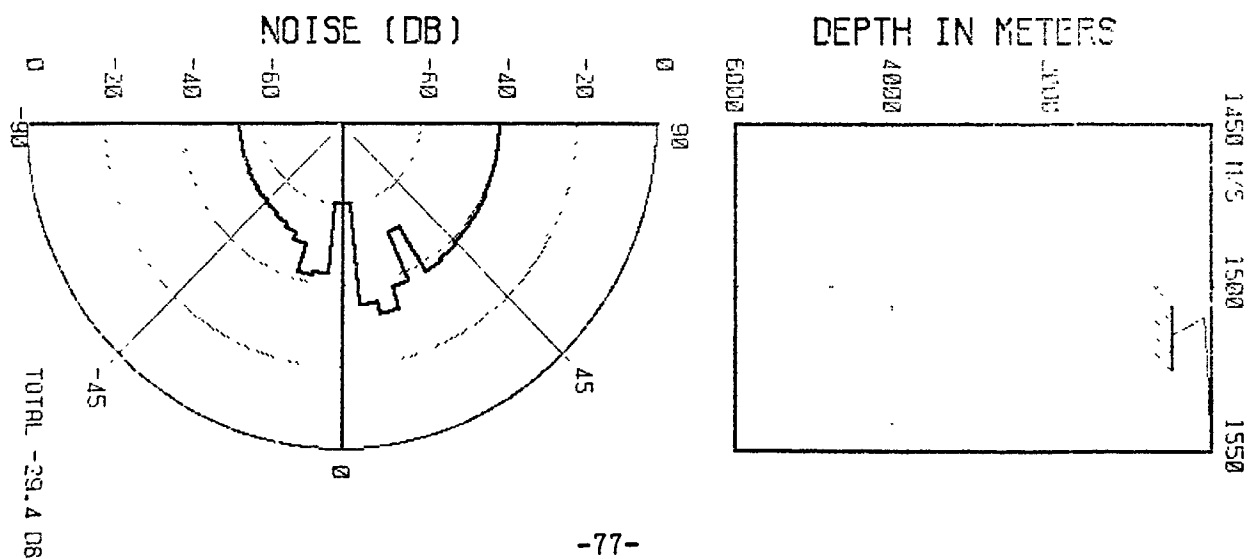
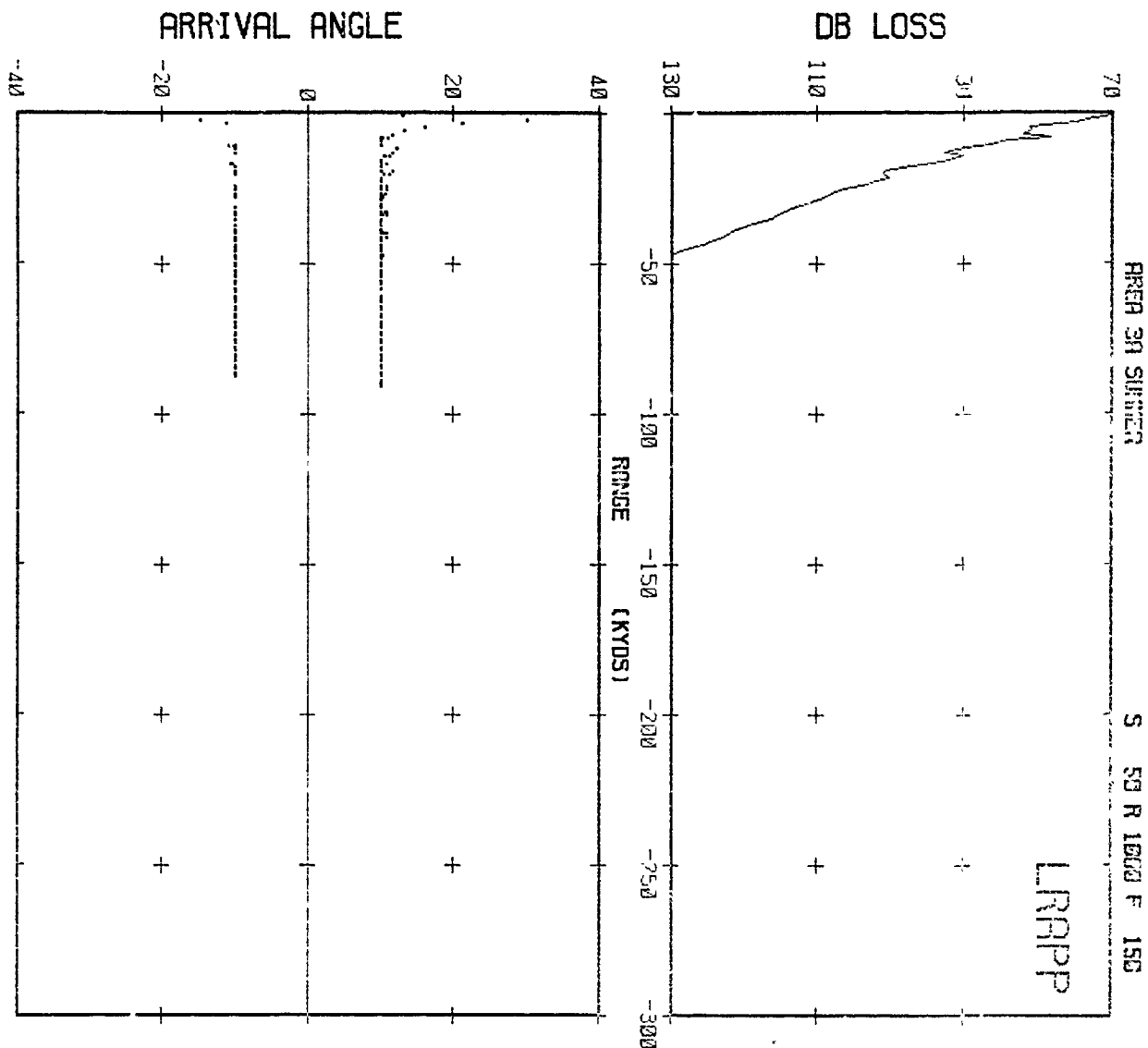


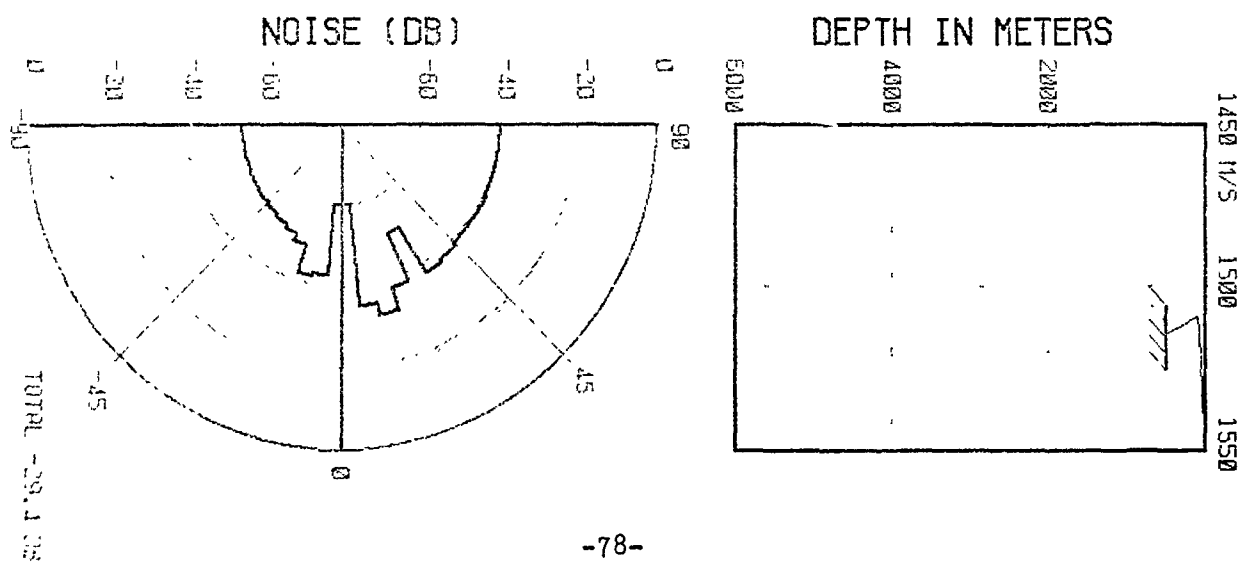
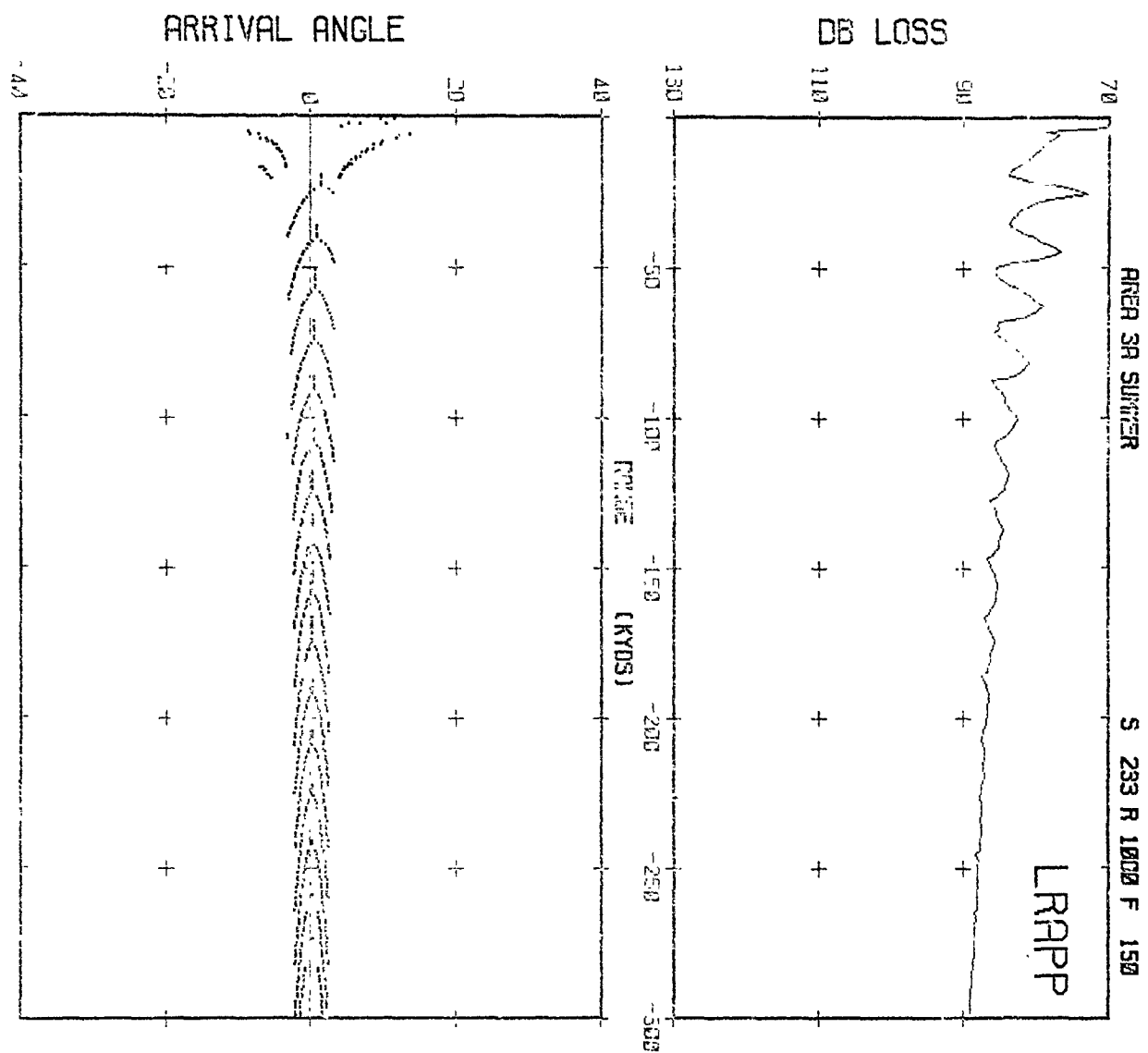
NOISE (DB)

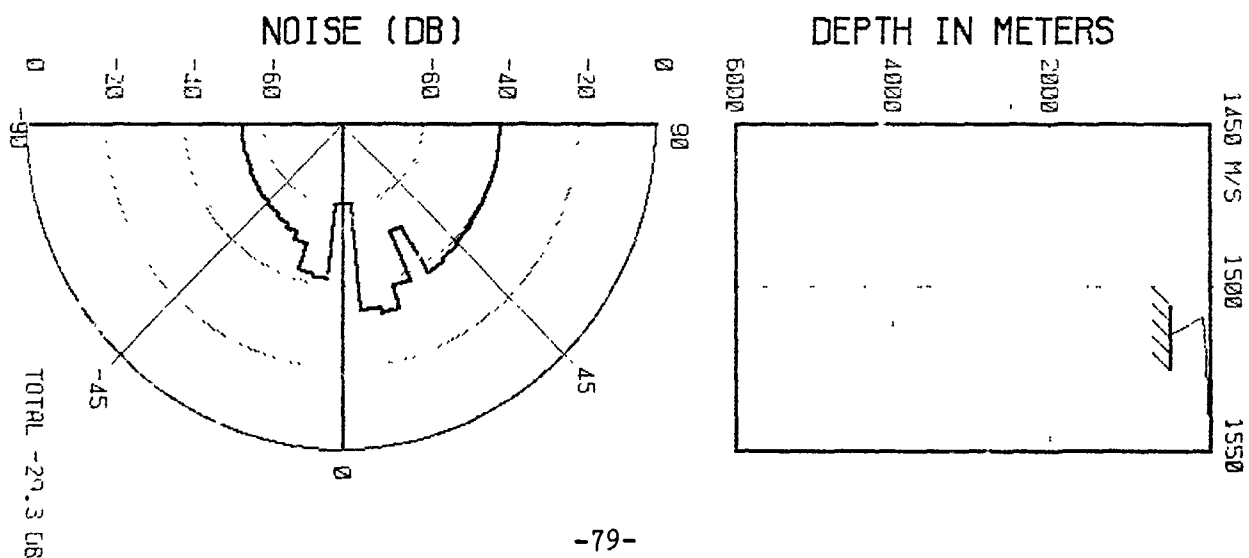
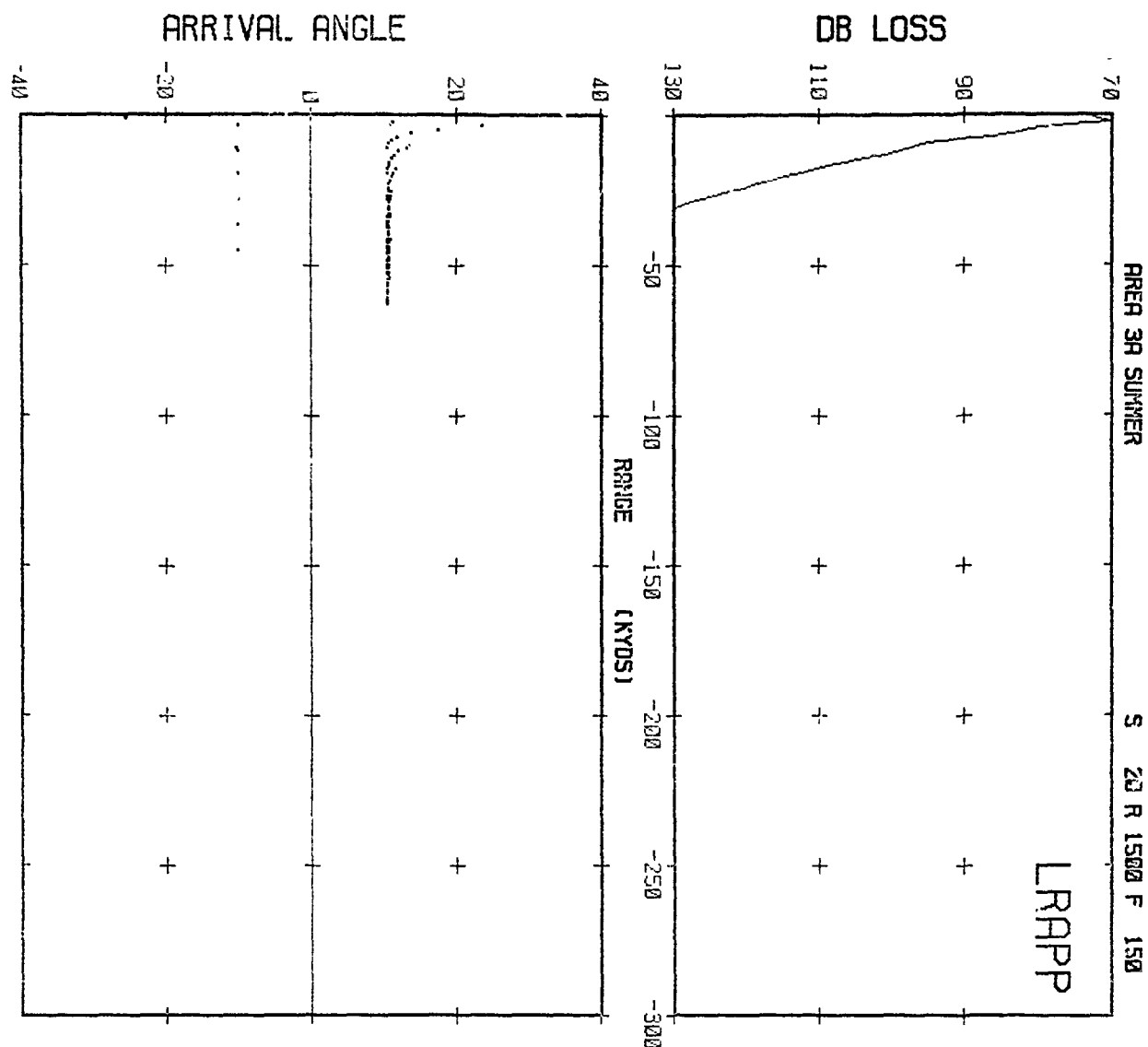


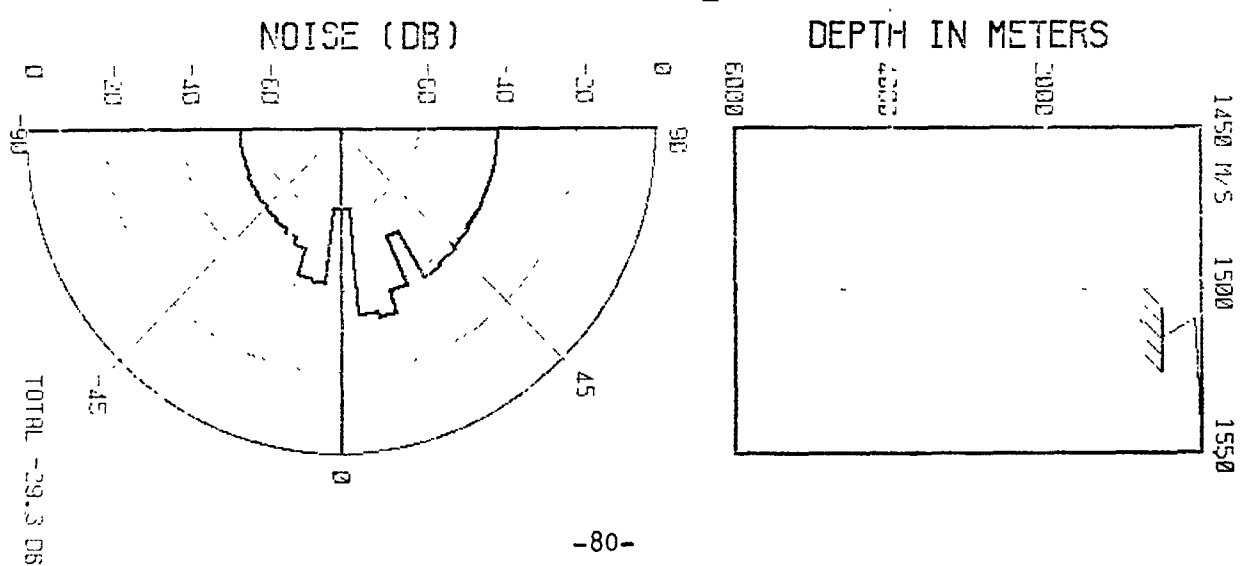
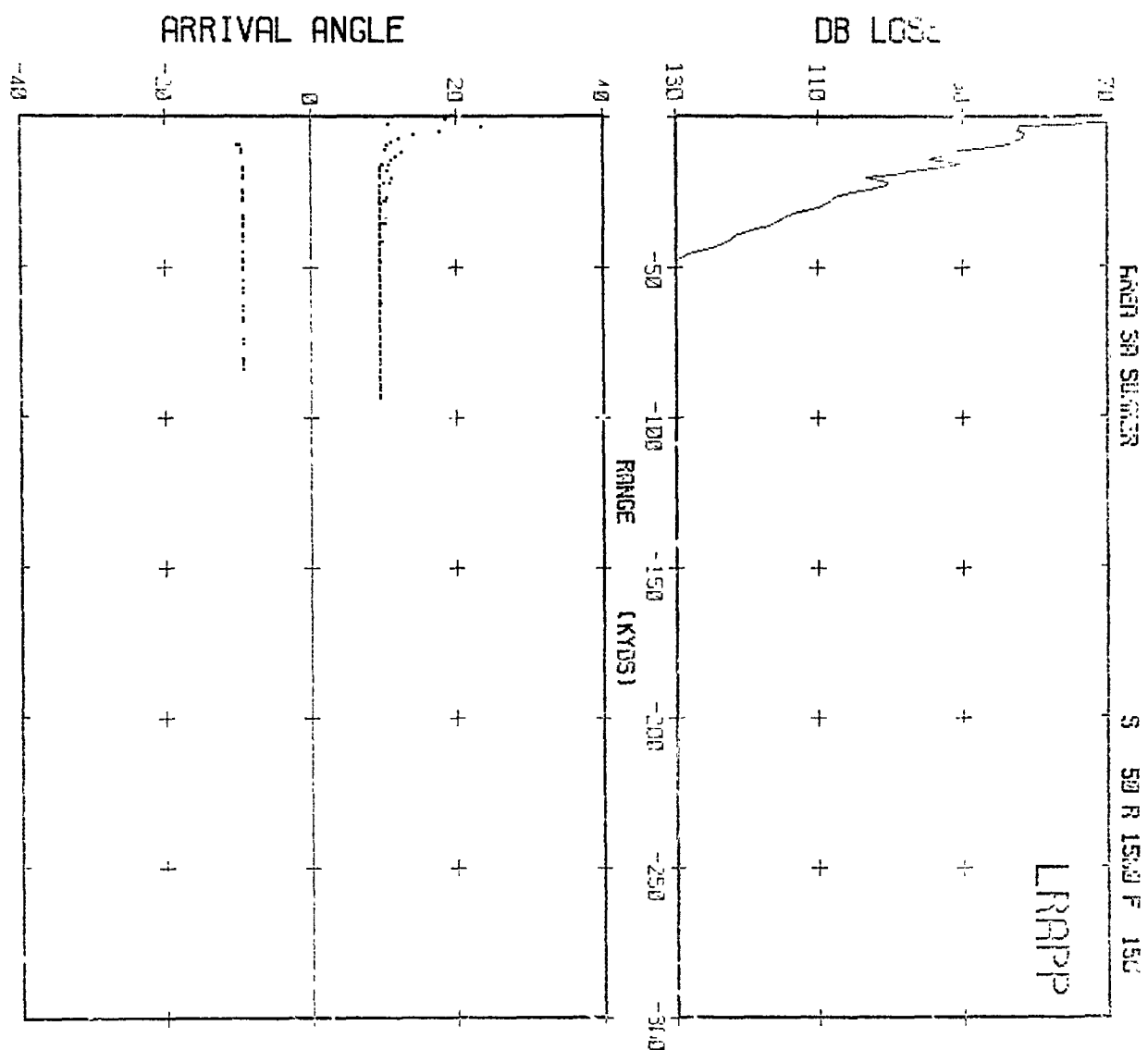
TOTAL -23.6 DB









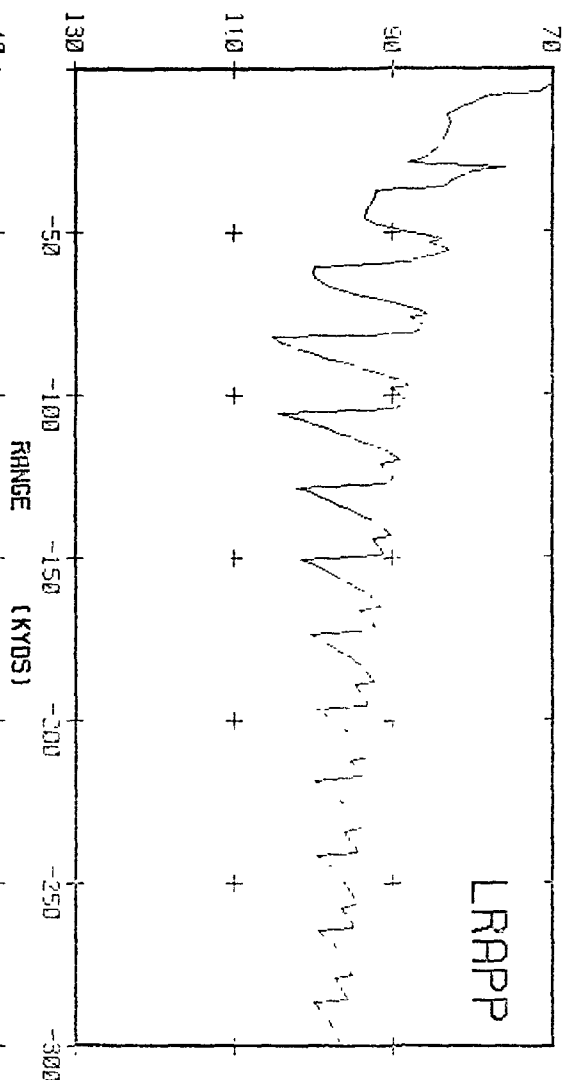


FINER 3A SUMMER

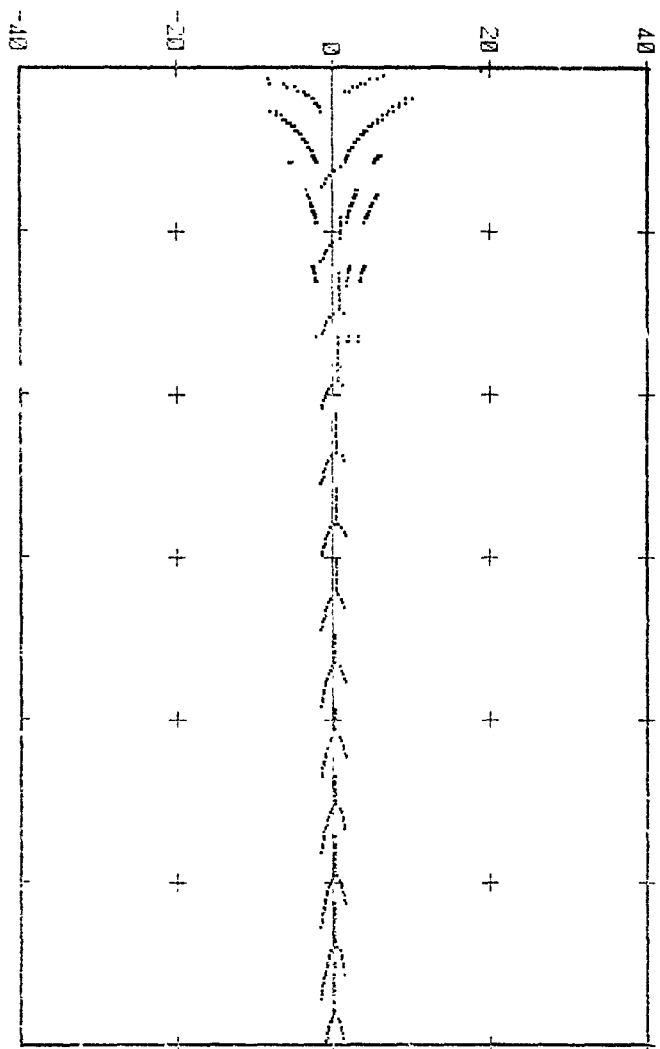
S 233 R 1503 F 150

1450 M/S 1500 1550

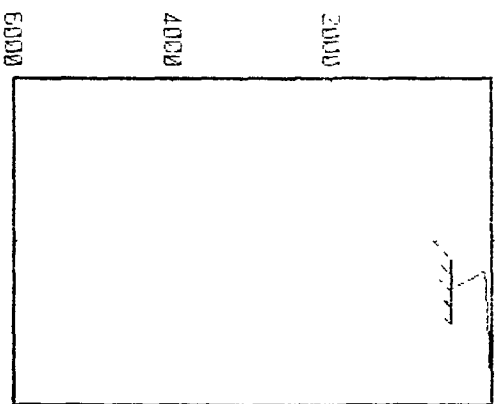
DB LOSS



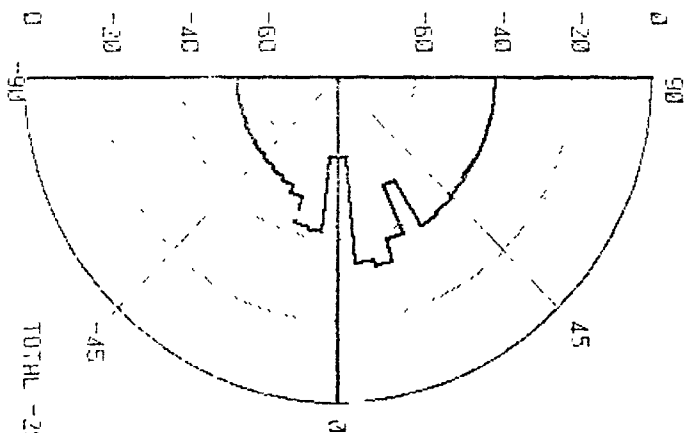
ARRIVAL ANGLE

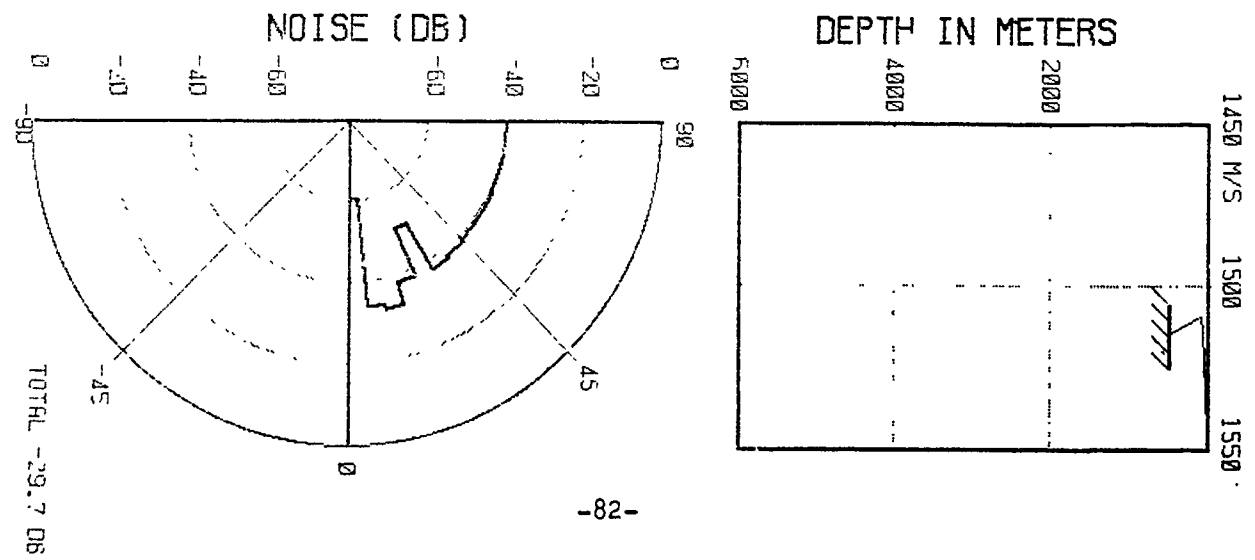
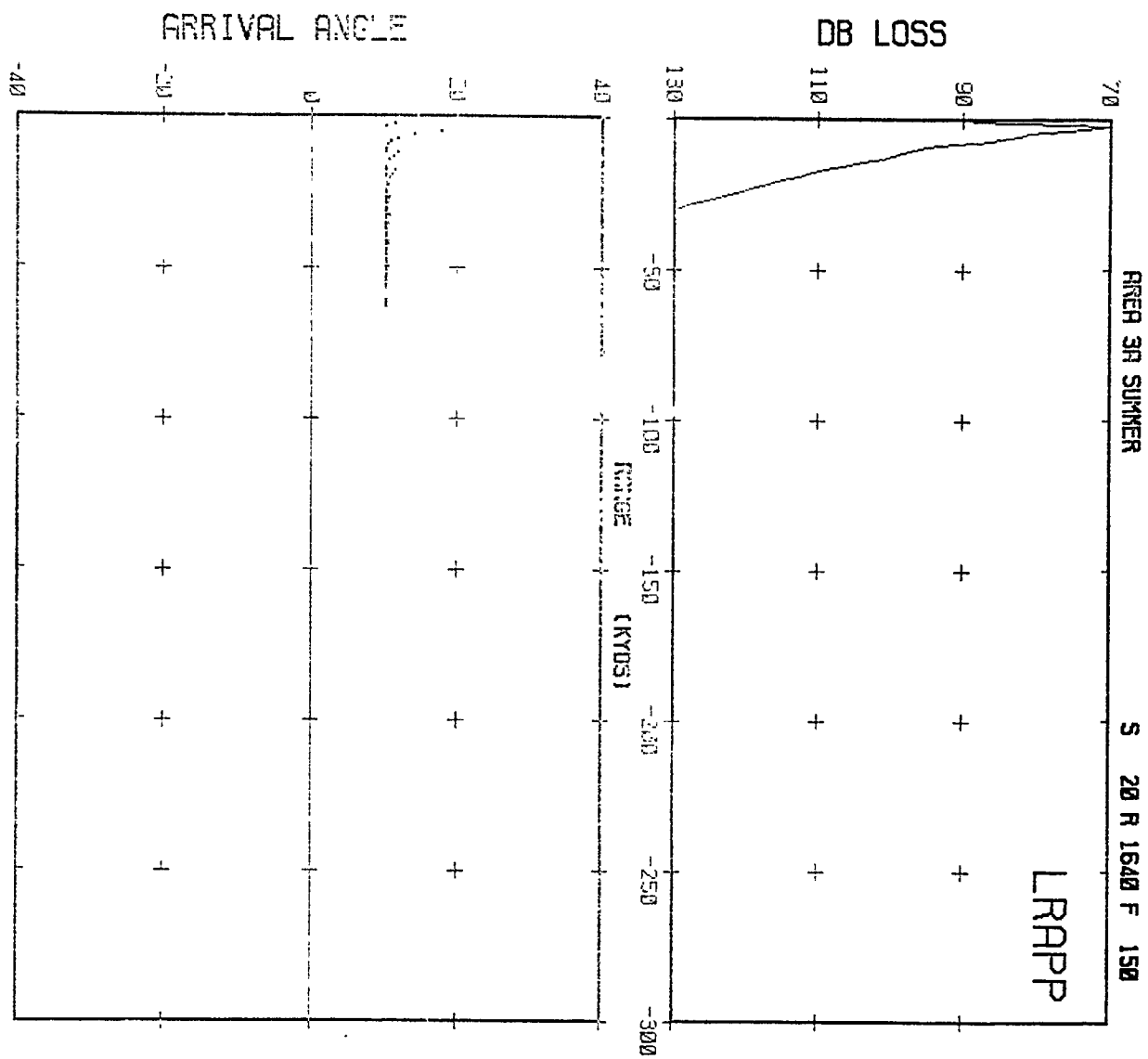


DEPTH IN METERS

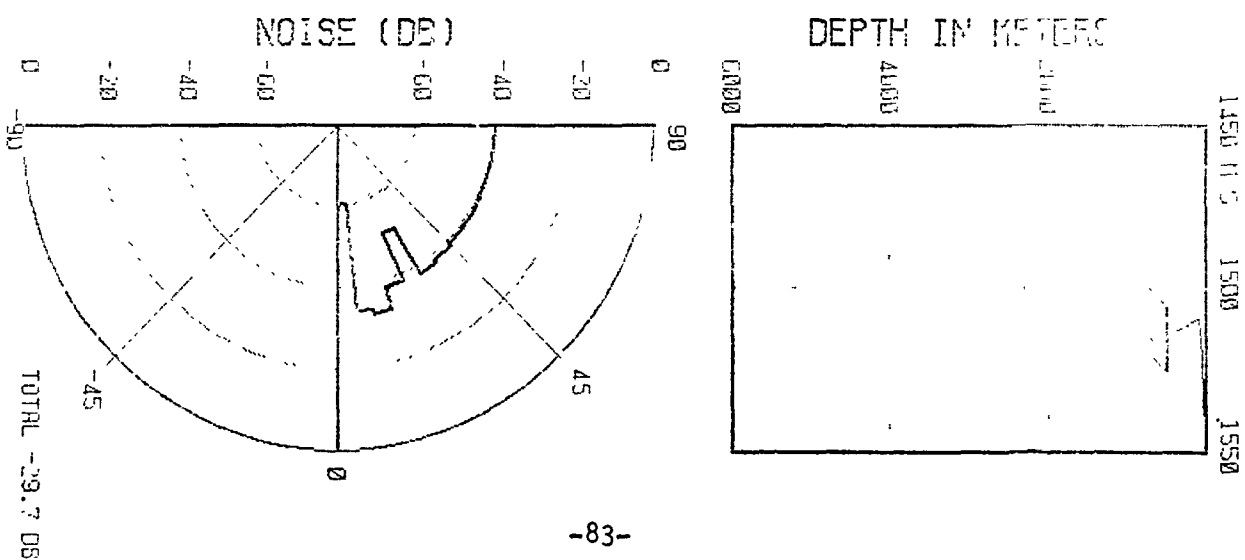
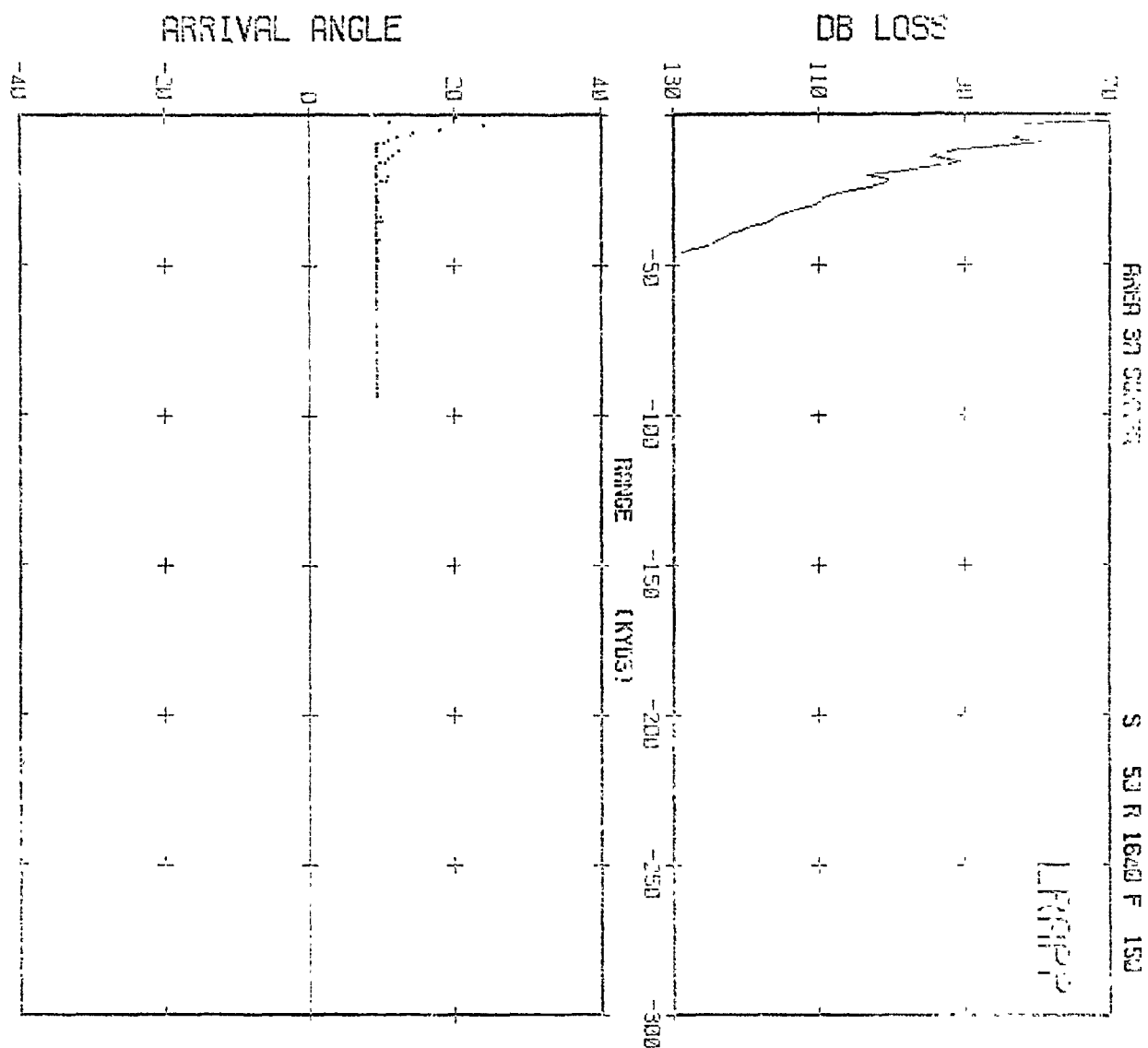


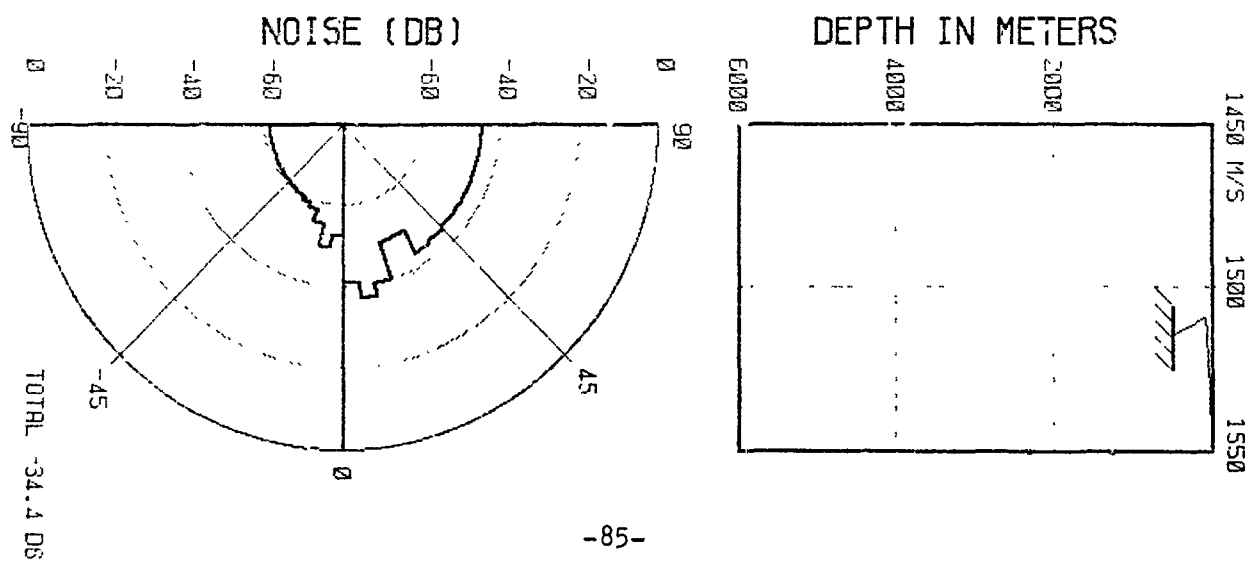
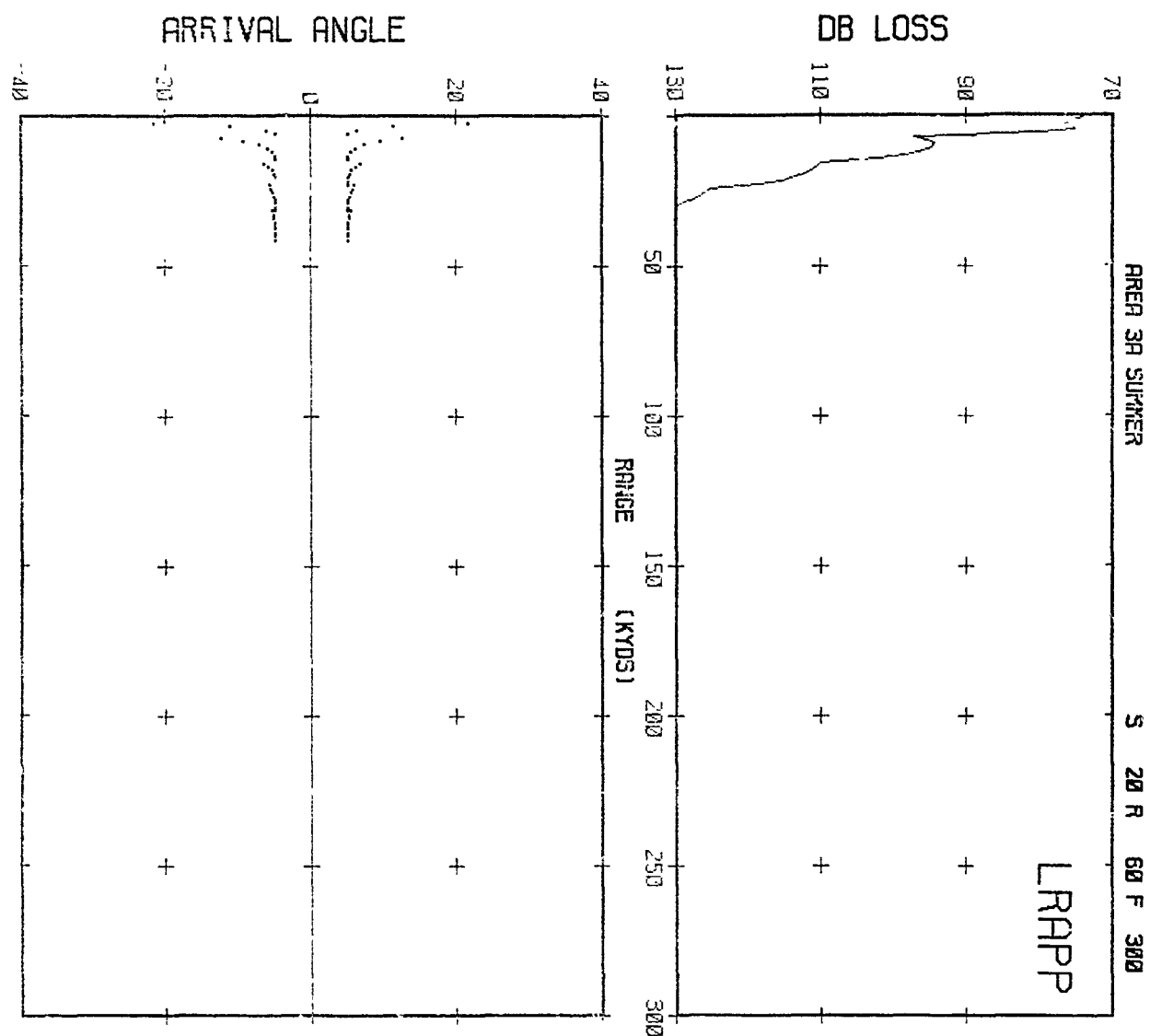
NOISE (DB)





TOTAL -29.7 DB



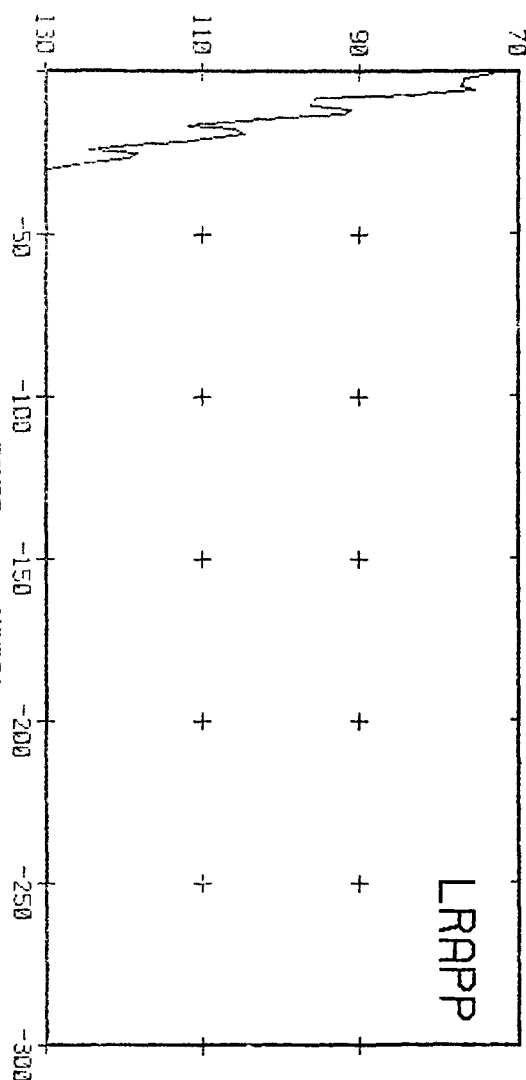


AREA 3B SUMMER

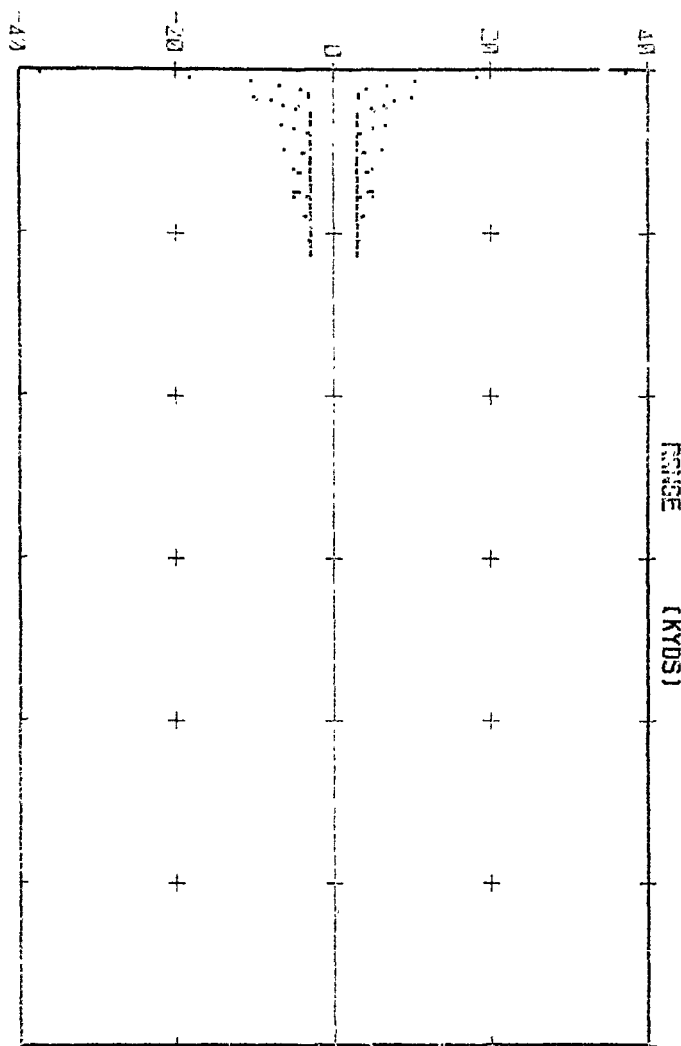
S 50 R 60 F 300

1450 M/S 1500 1550

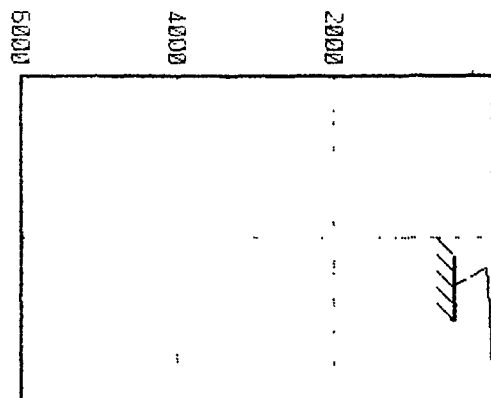
DB LOSS



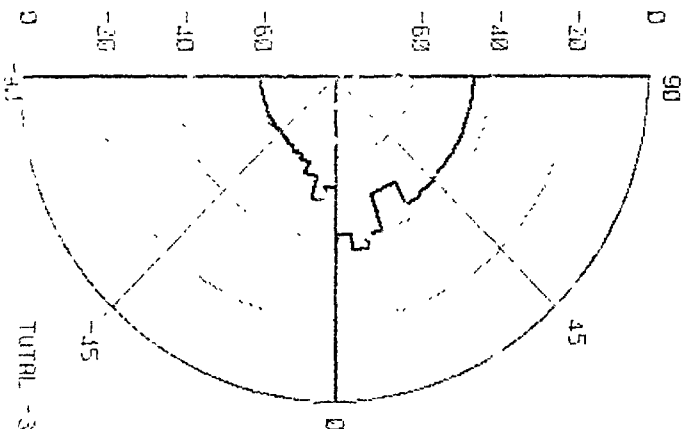
ARRIVAL ANGLE



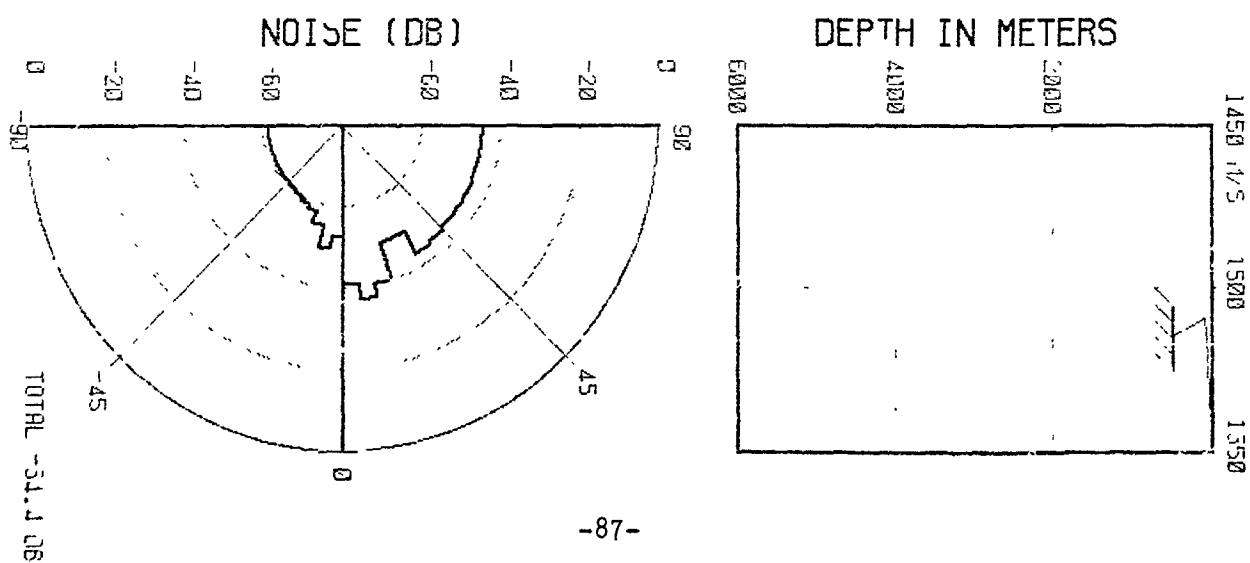
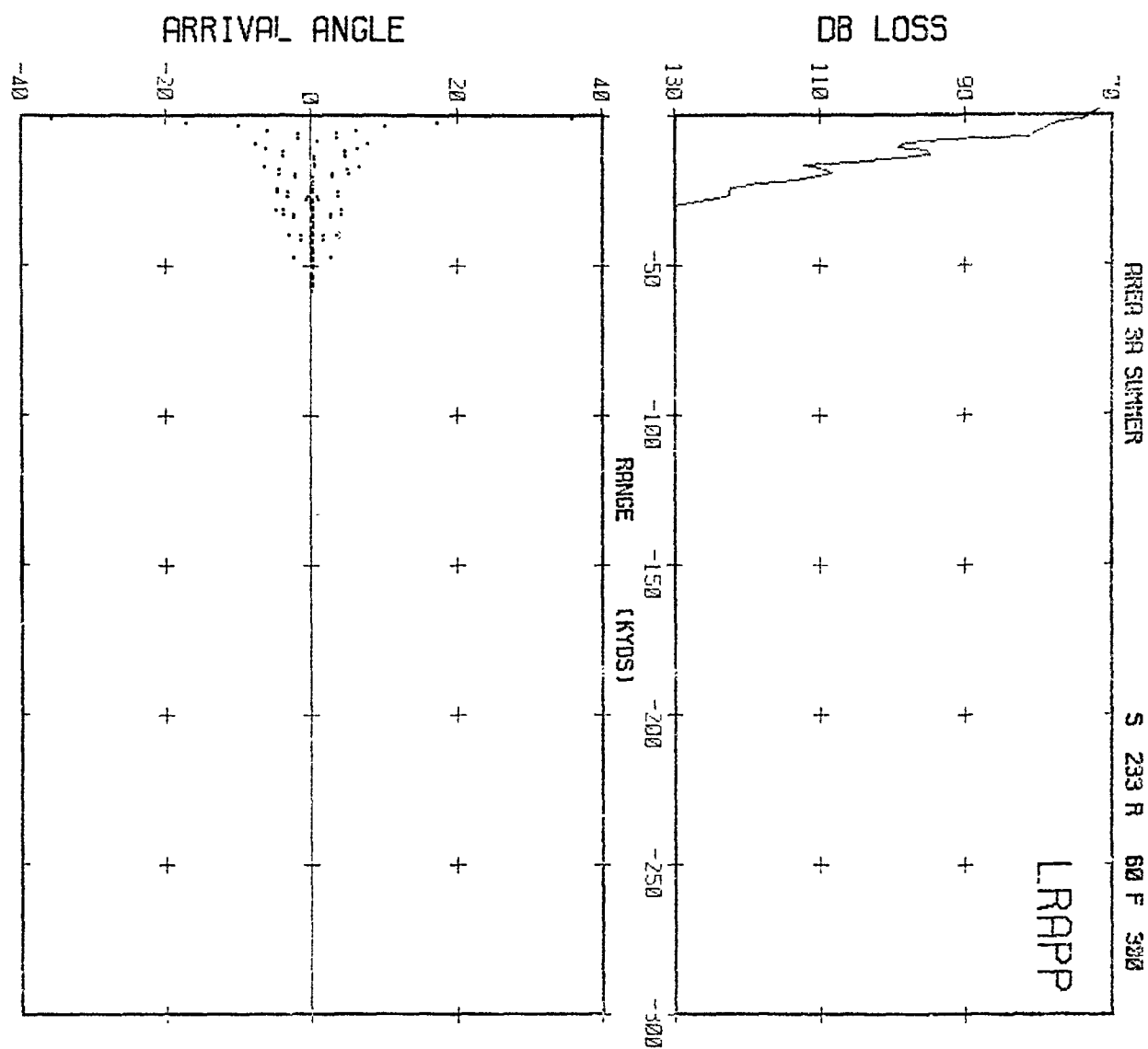
DEPTH IN METERS

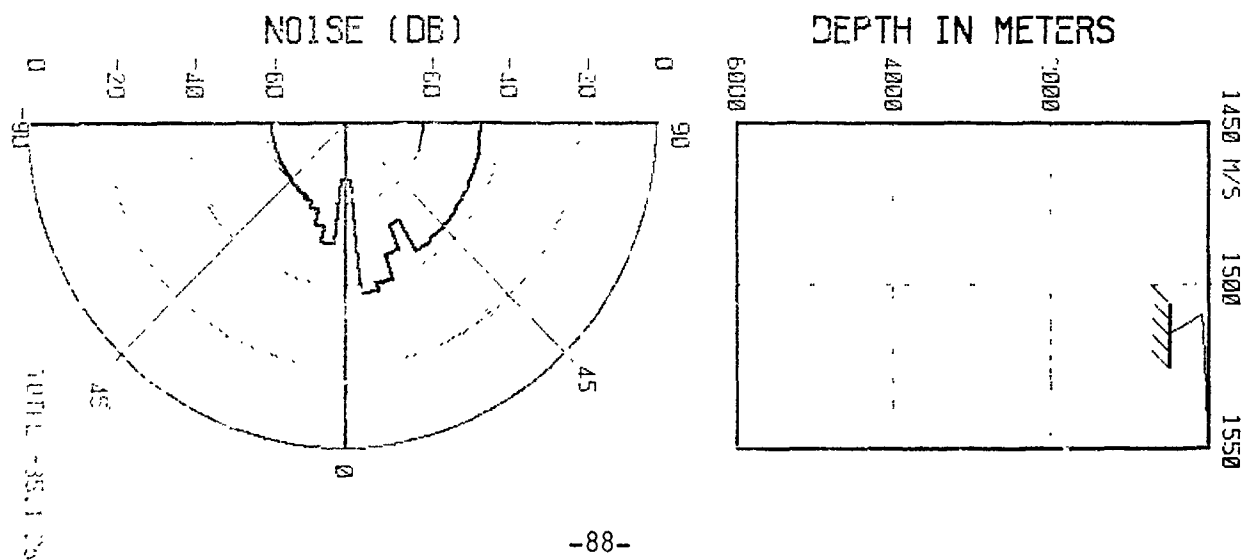
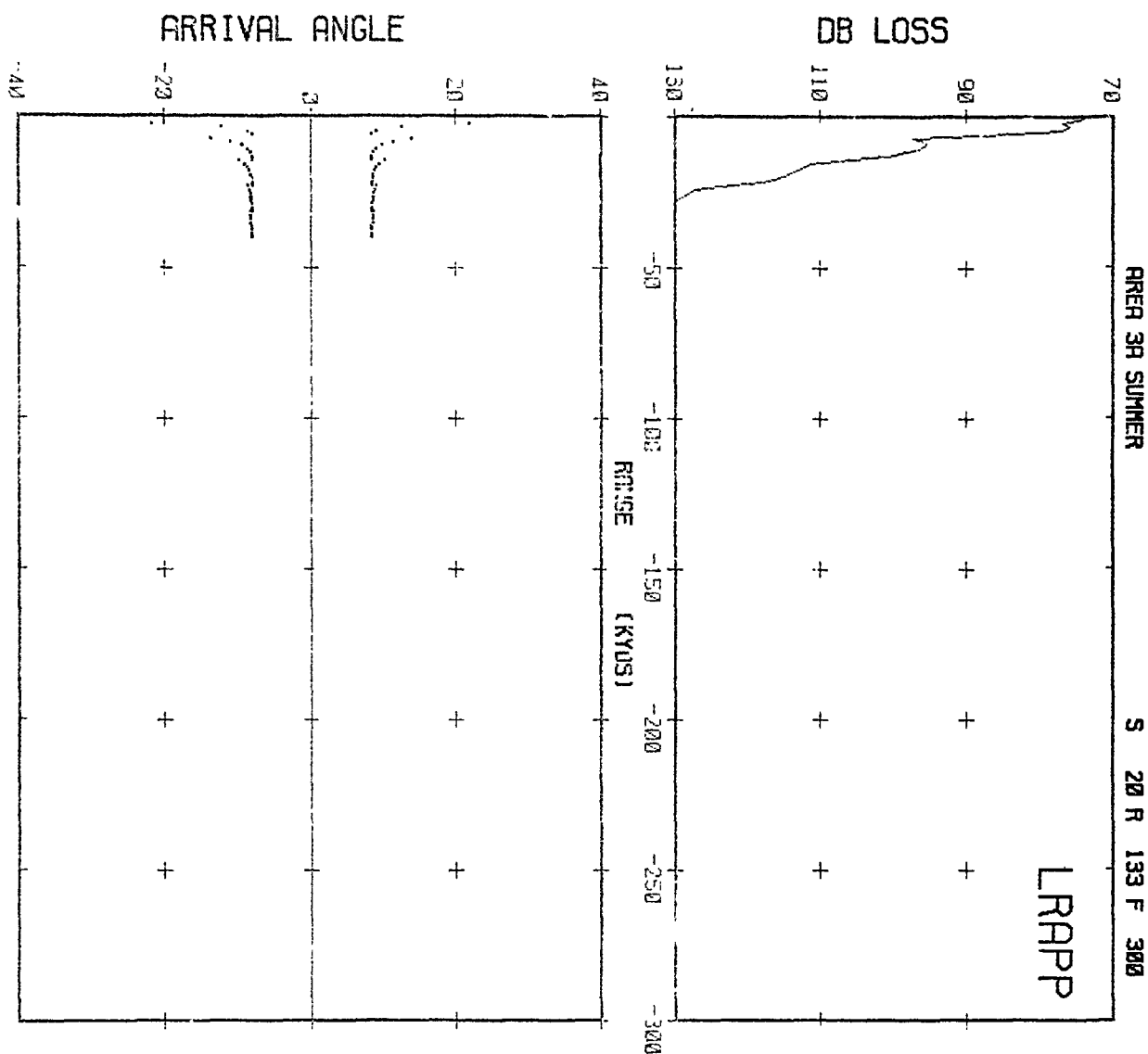


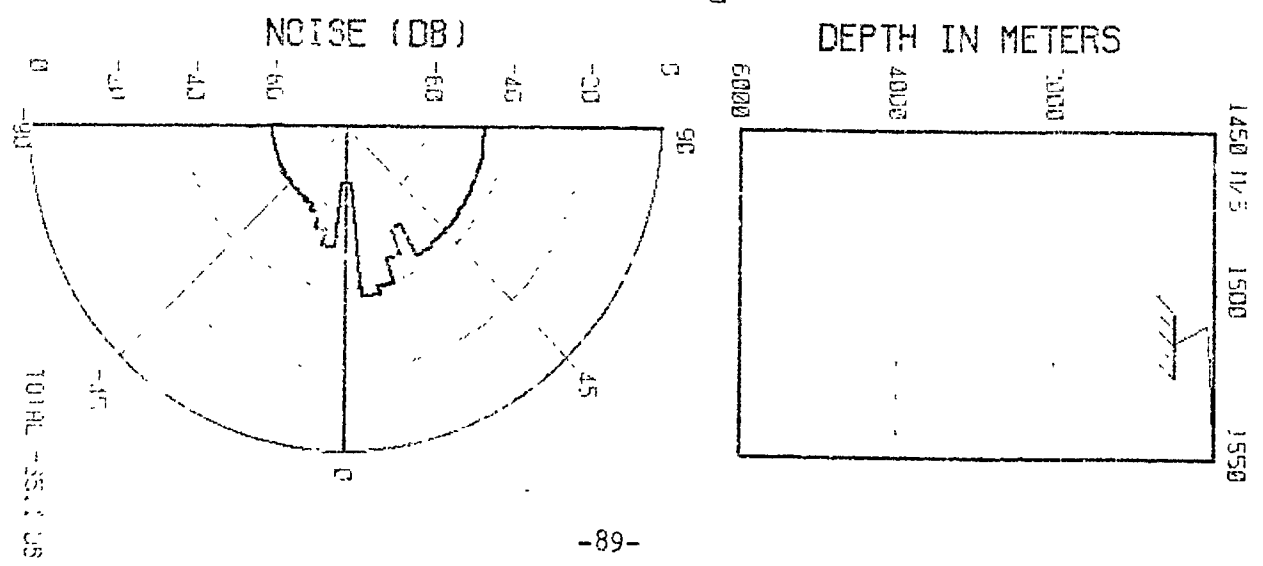
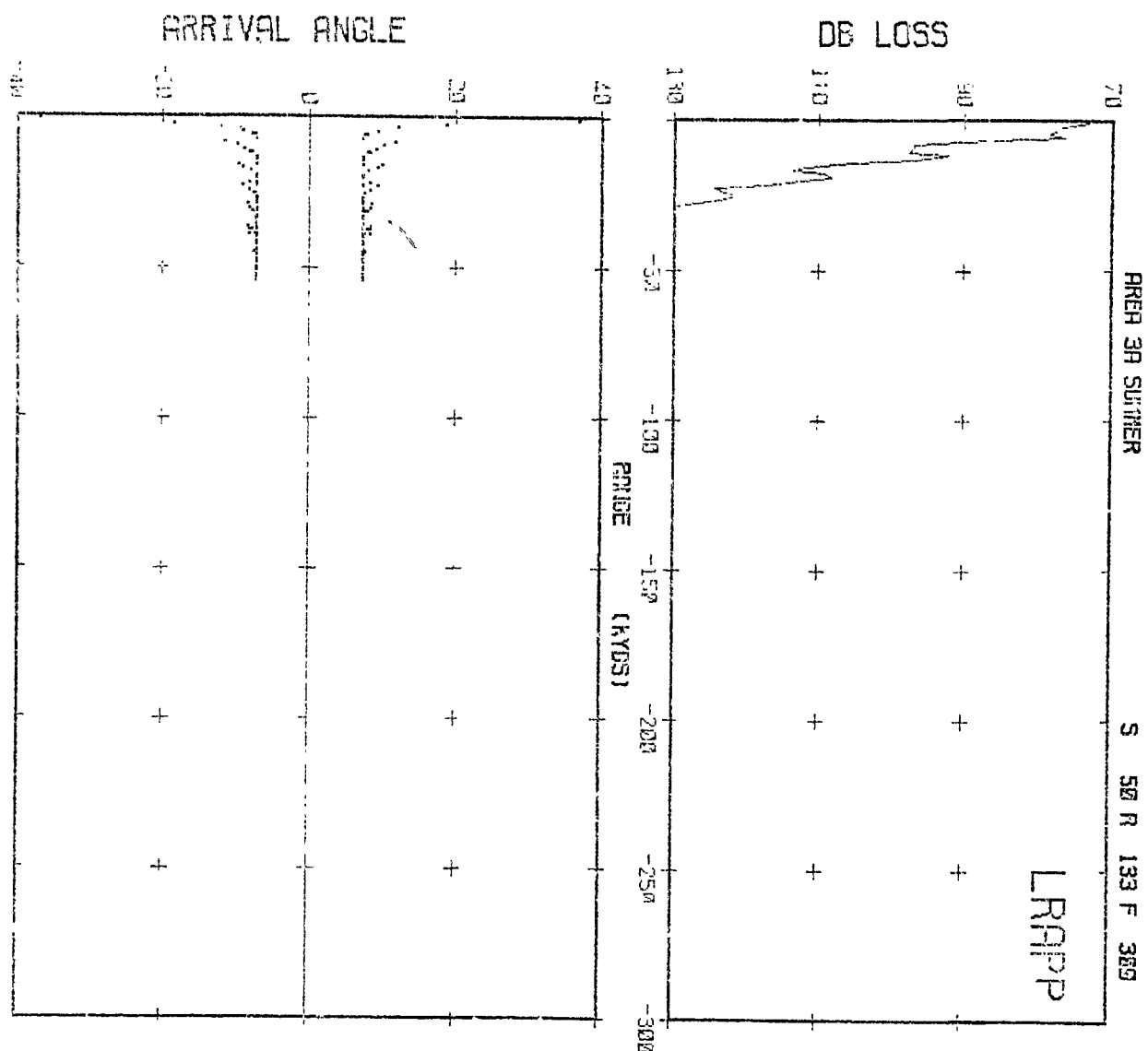
NOISE (DB)



TOTRL -34.2 db





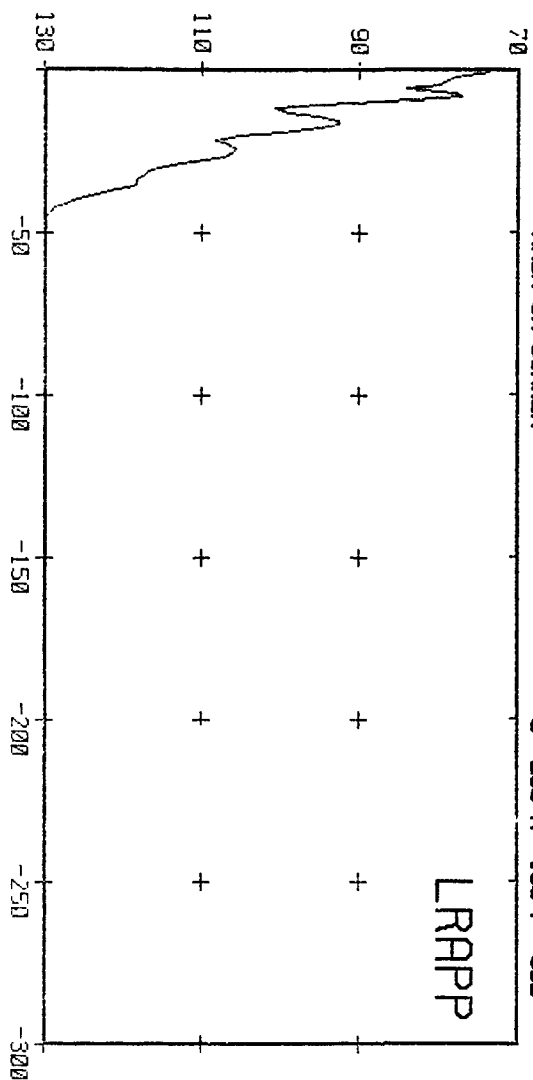


RREA 3A SUMMER

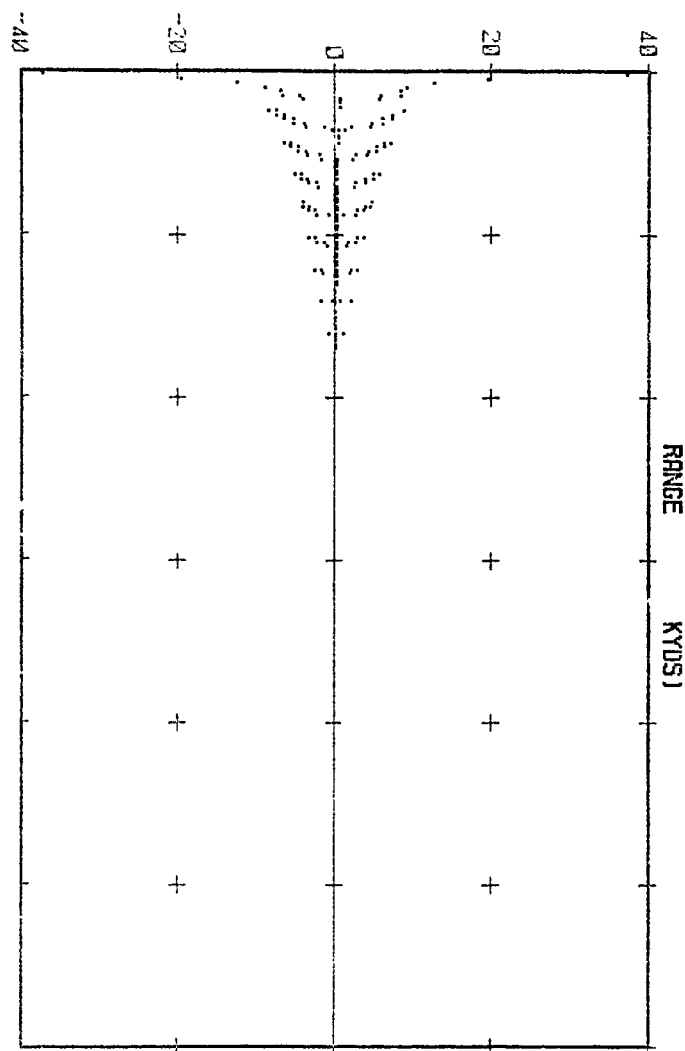
S 233 R 133 F 360

1450 M/S 1500 1550

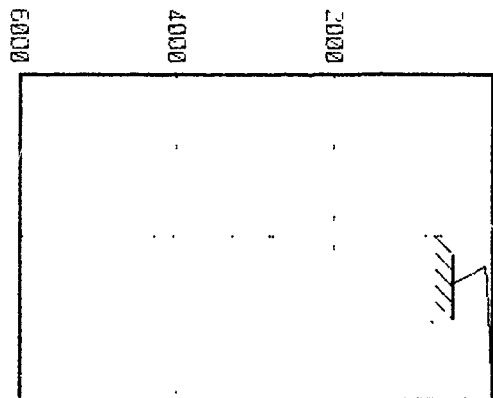
DB LOSS



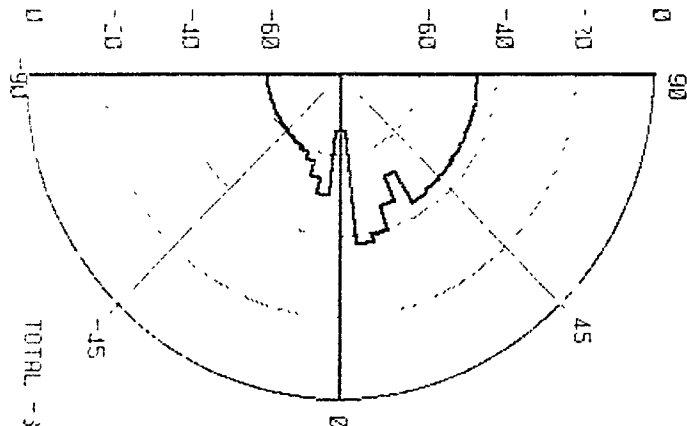
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



TOTAL -35.1 LB

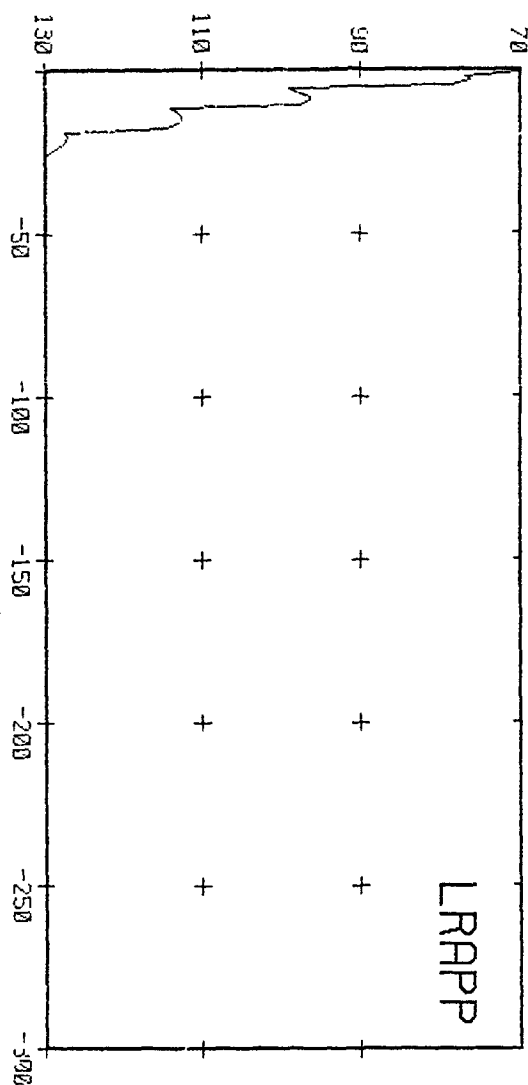
AREA 3A SUMMER

S 20 R 262 F 300

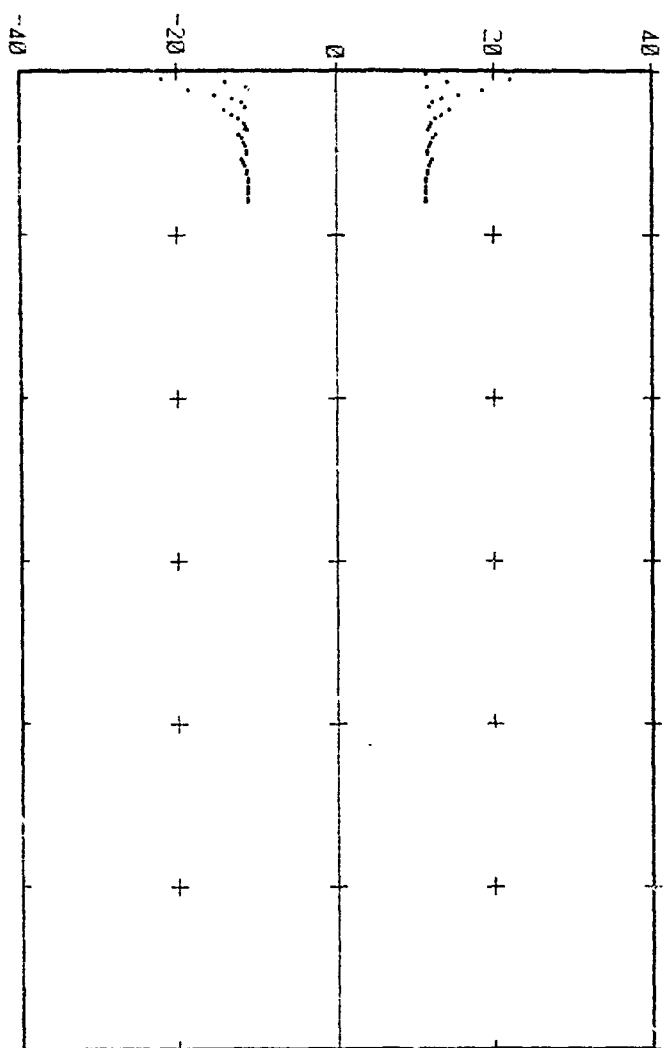
1450 M/S 1500

1550

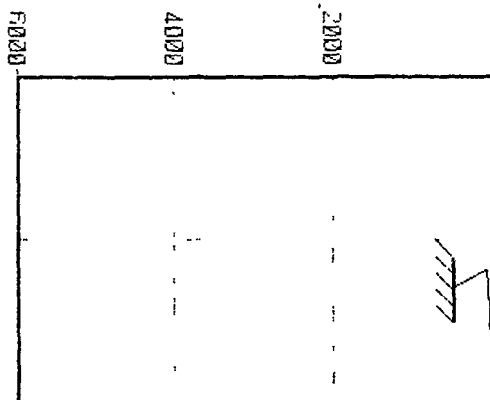
DB LOSS



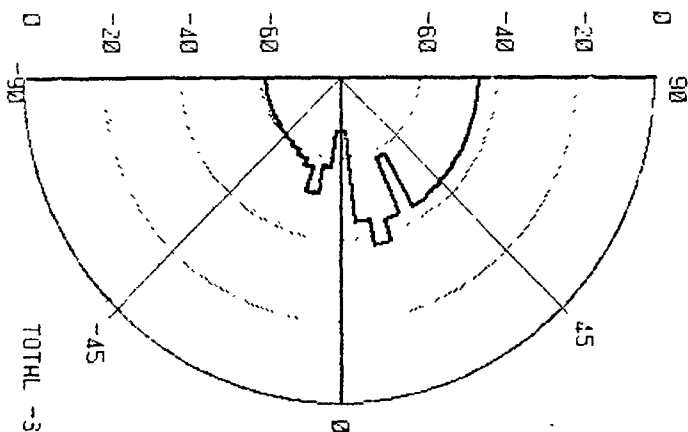
ARRIVAL ANGLE

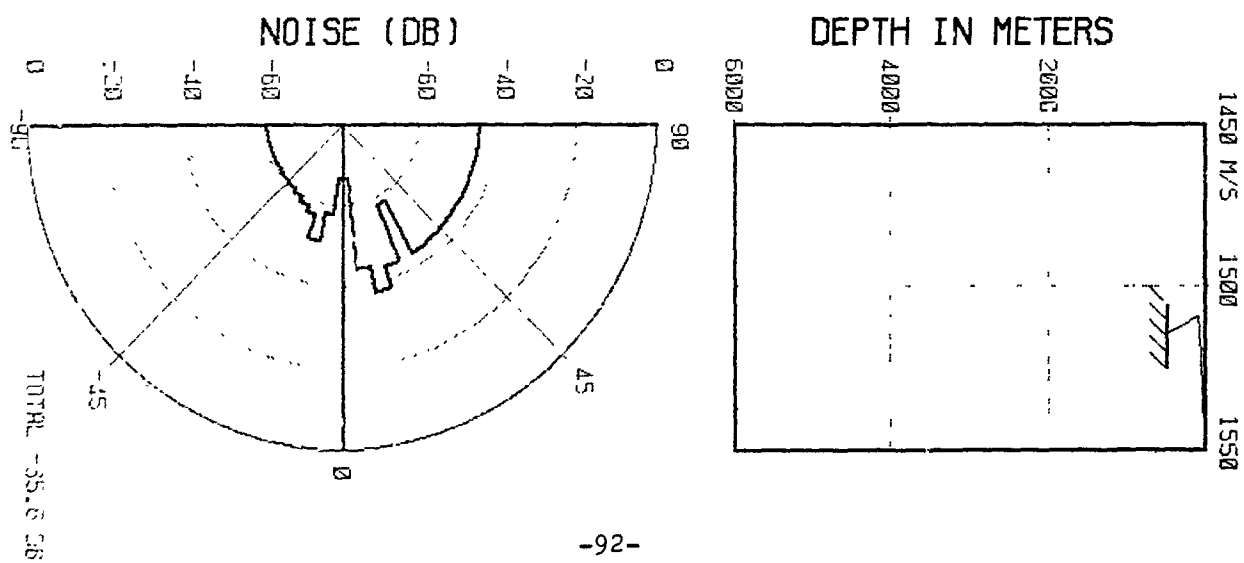
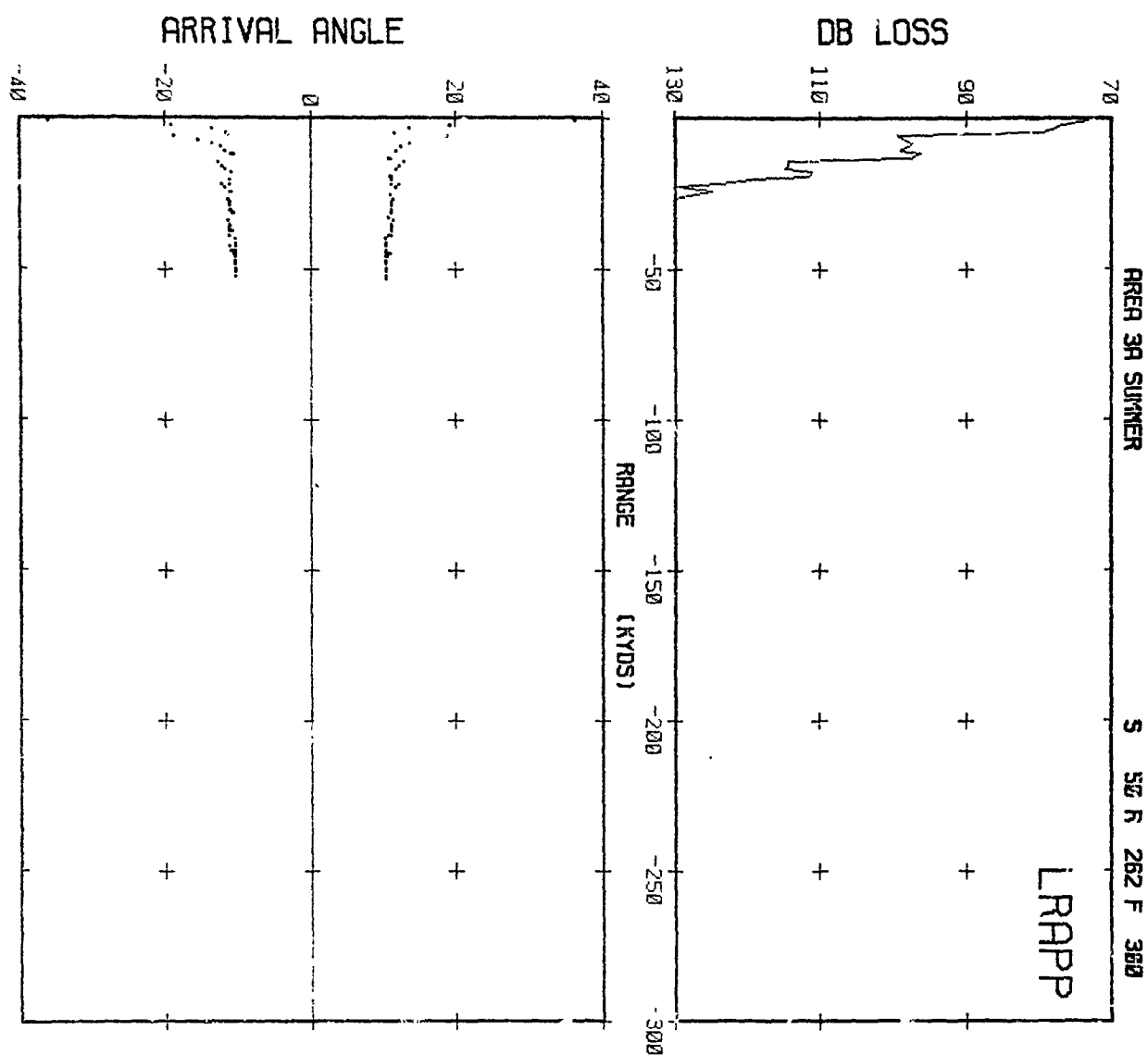


DEPTH IN METERS



NOISE (DB)



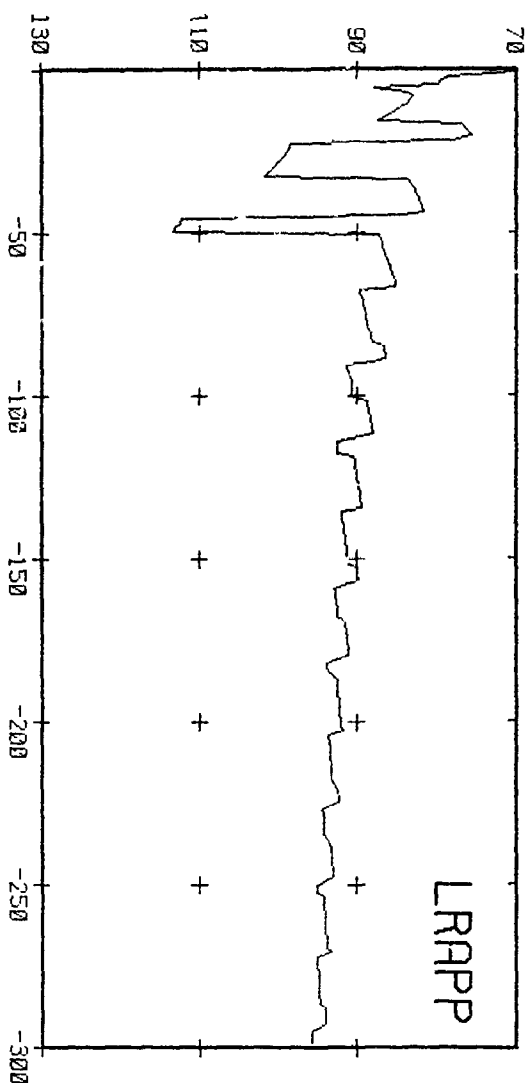


AREA 3A SUMMER

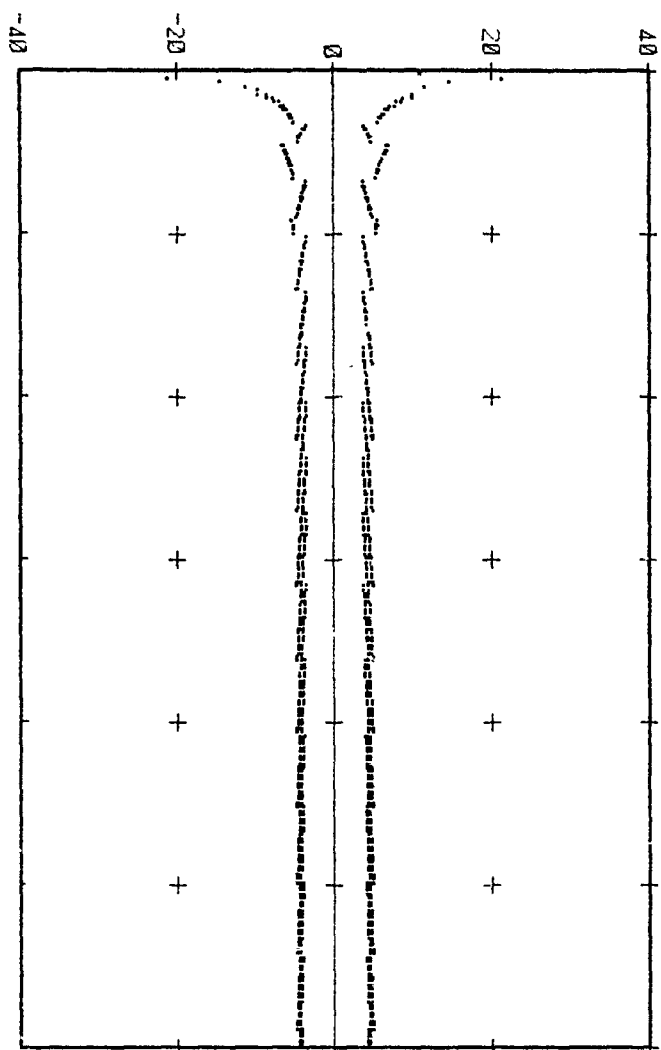
S 233 R 262 F 300

1450 M/S 1500 1550

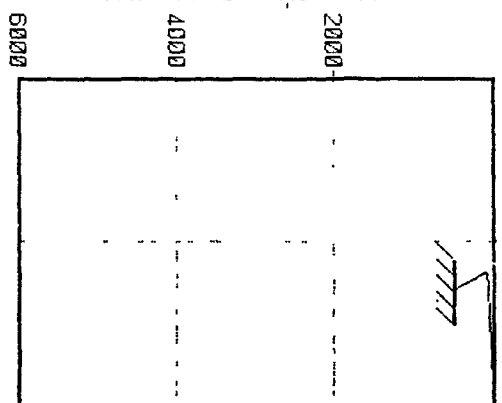
DB LOSS



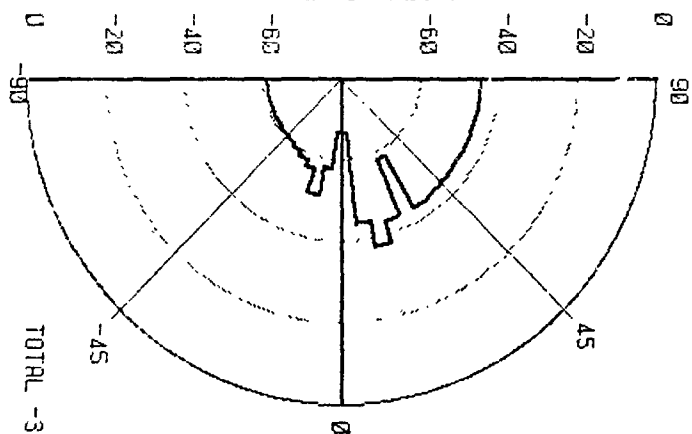
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



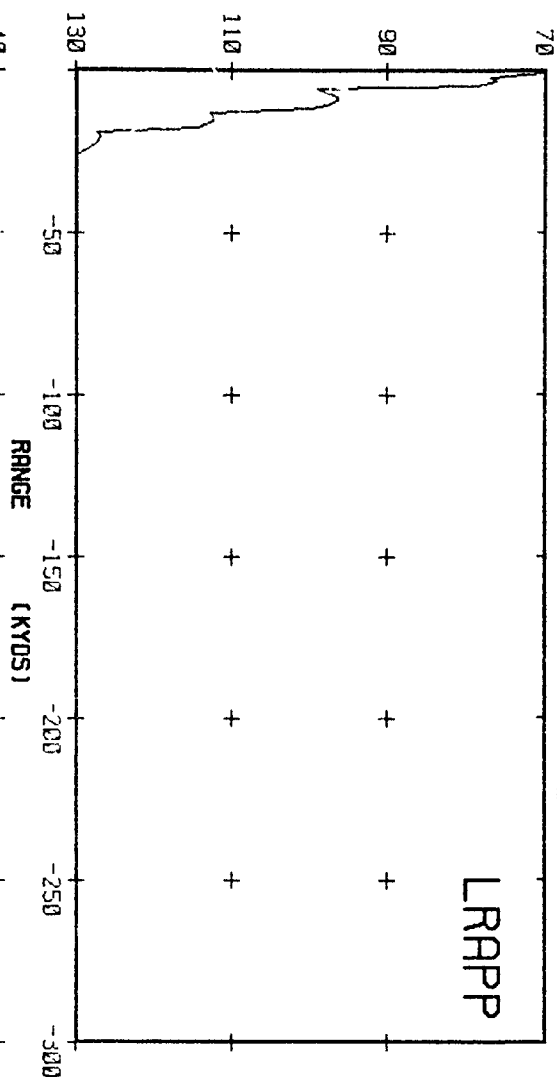
TOTAL -35.6 DB

AREA 3A SUMMER

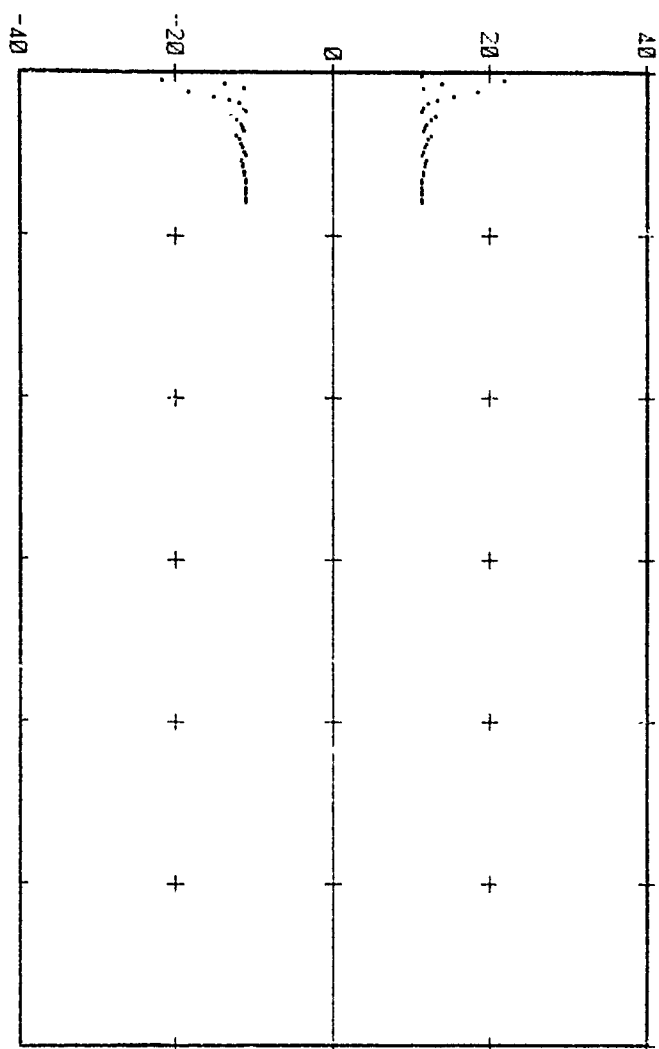
S 20 R 300 F 300

LRAPP

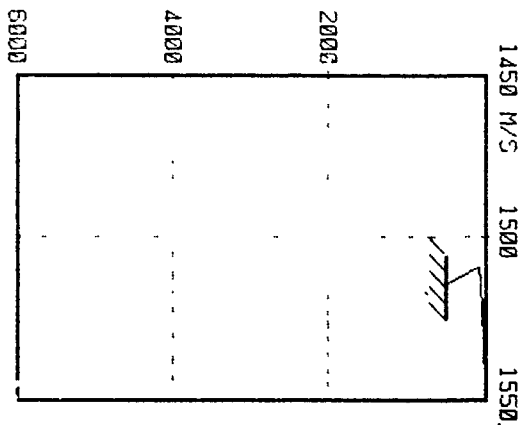
DB LOSS



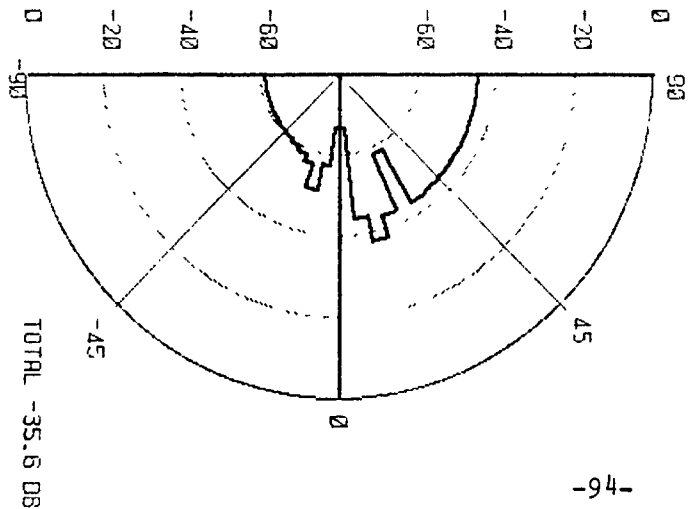
ARRIVAL ANGLE

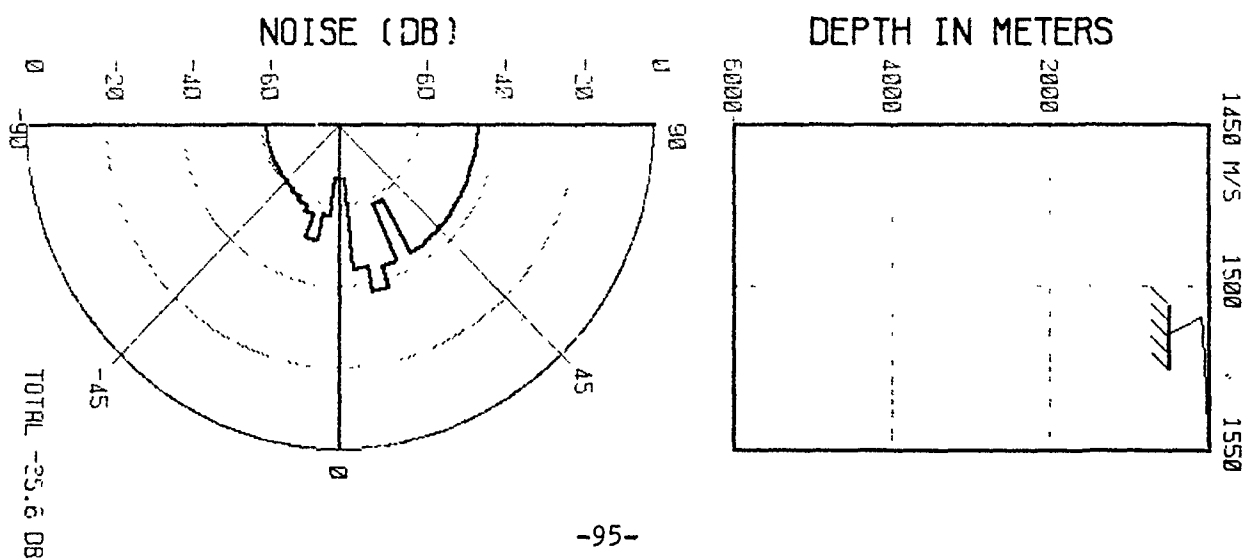
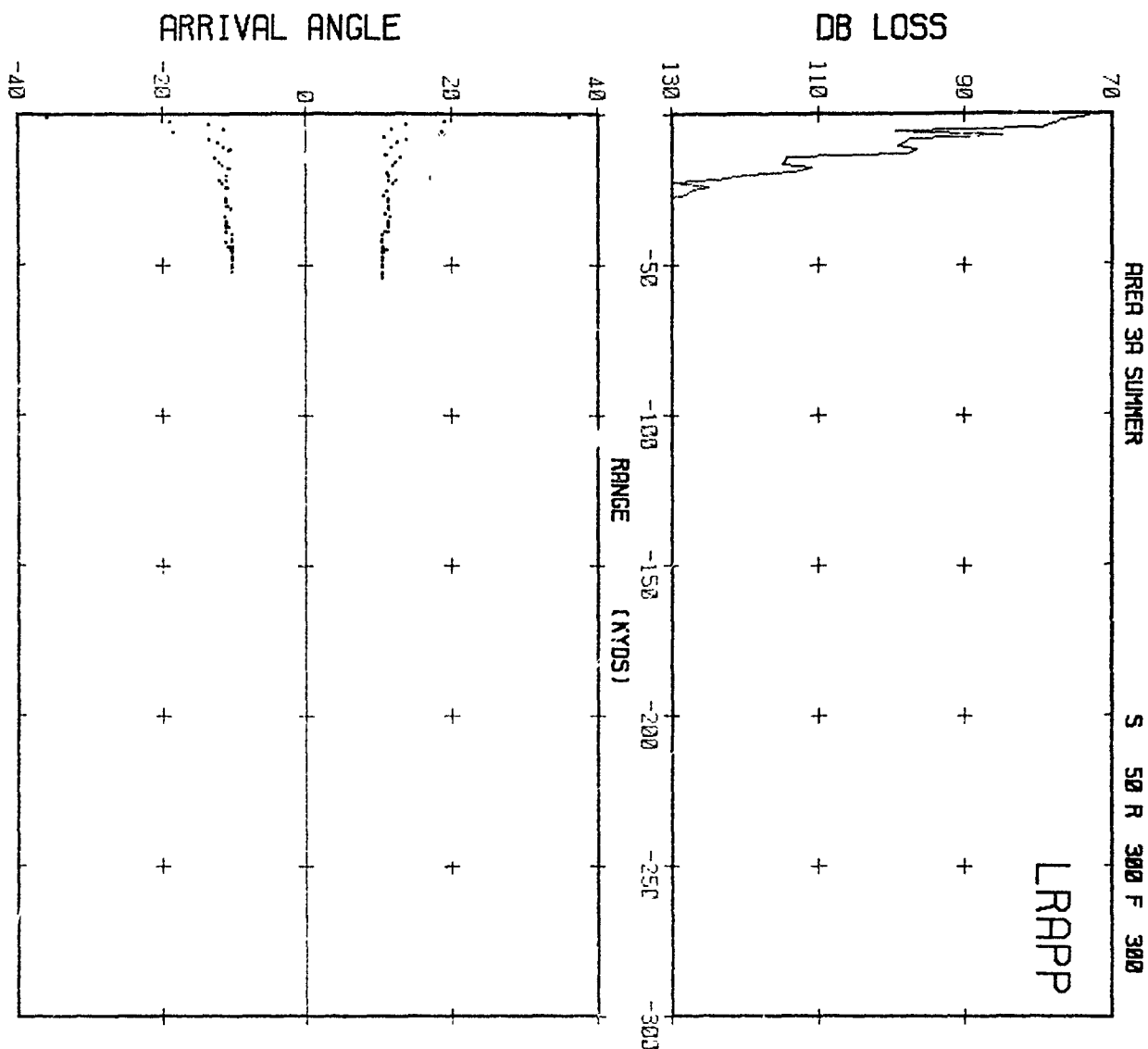


DEPTH IN METERS



NOISE (DB)



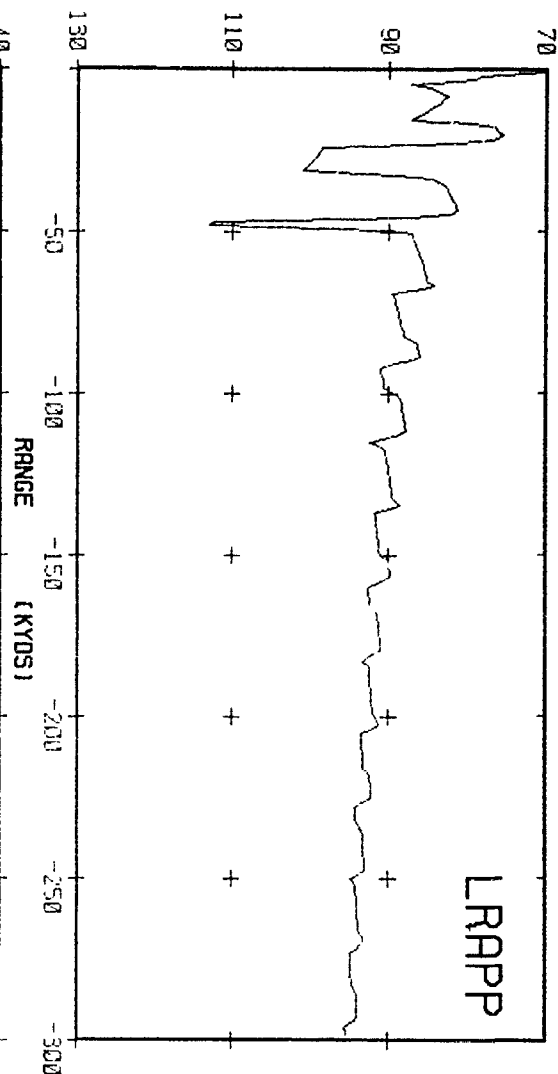


ARRER 3A SUMMER

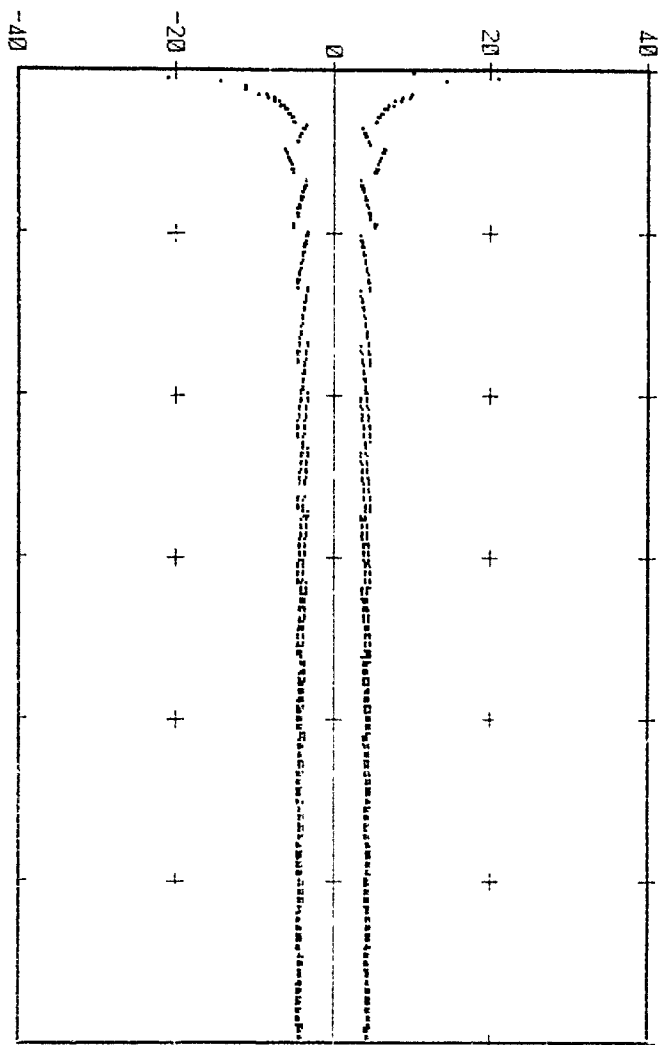
S 233 R 300 F 300

1450 M/S 1500 1550

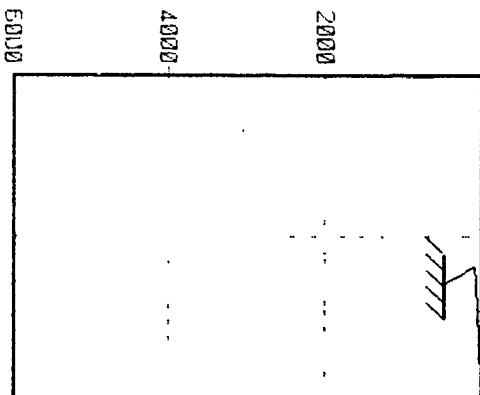
DB LOSS



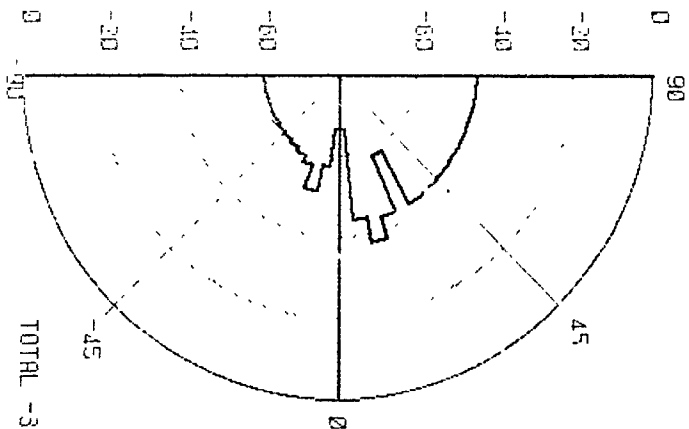
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



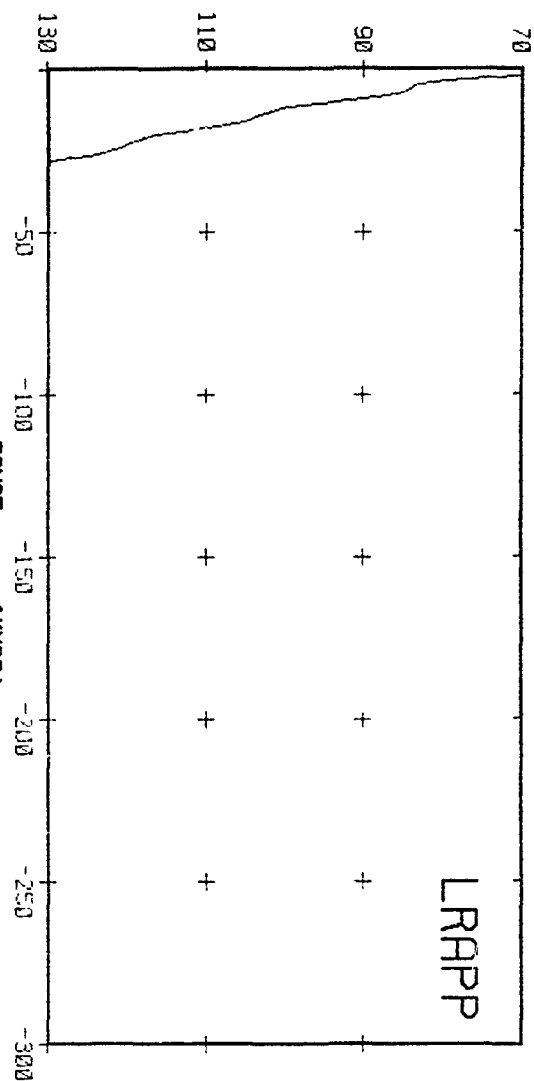
TOTAL -35.6 DB

AREA 3A SUMNER

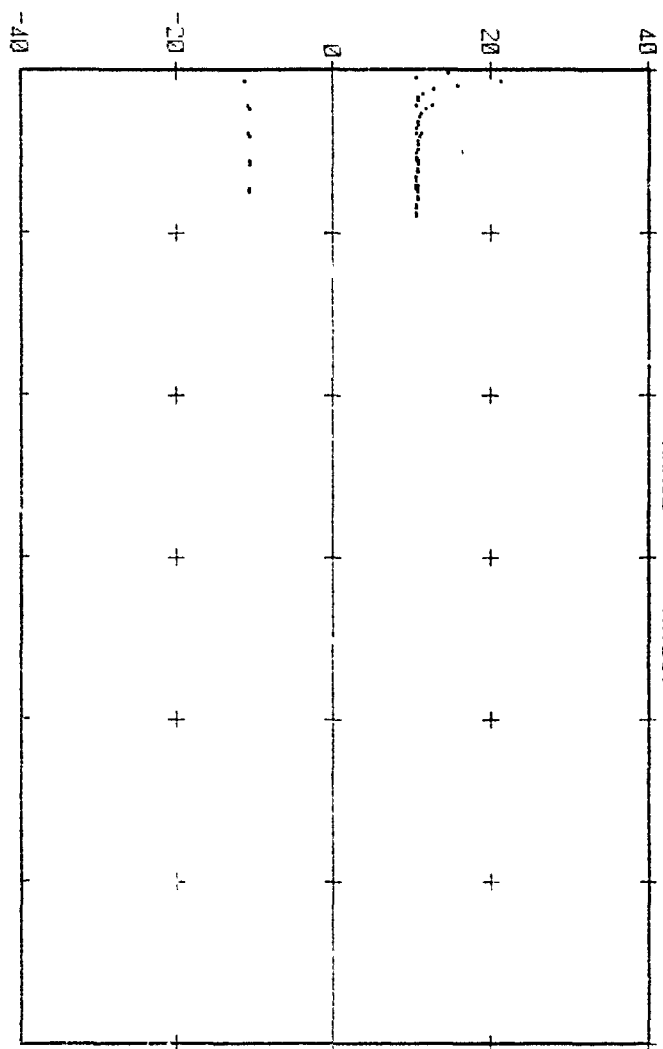
S 20 R 1000 F 300

1450 M/S 1500 1550

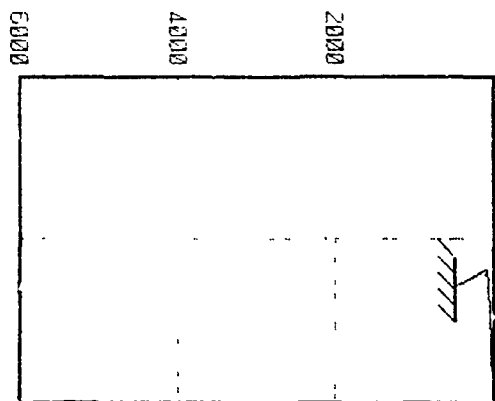
DB LOSS



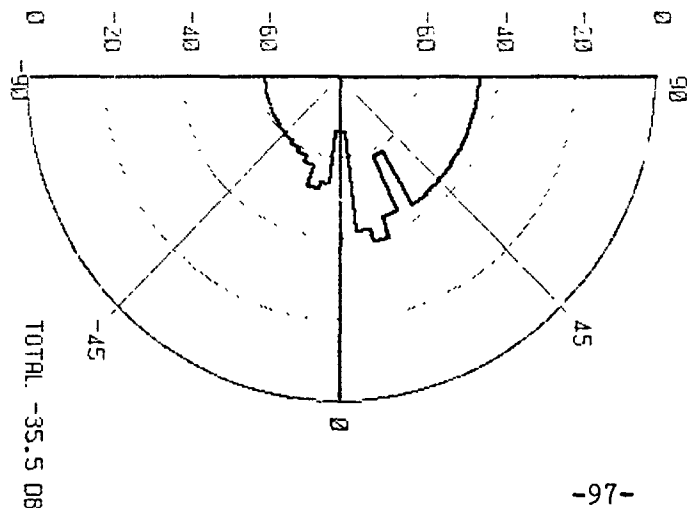
ARRIVAL ANGLE

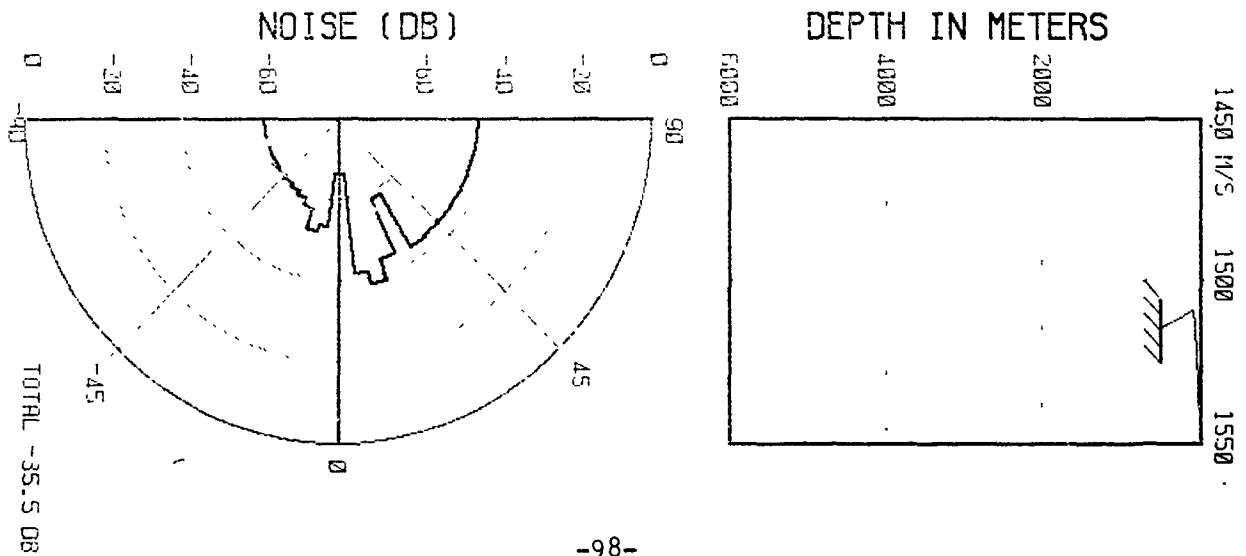
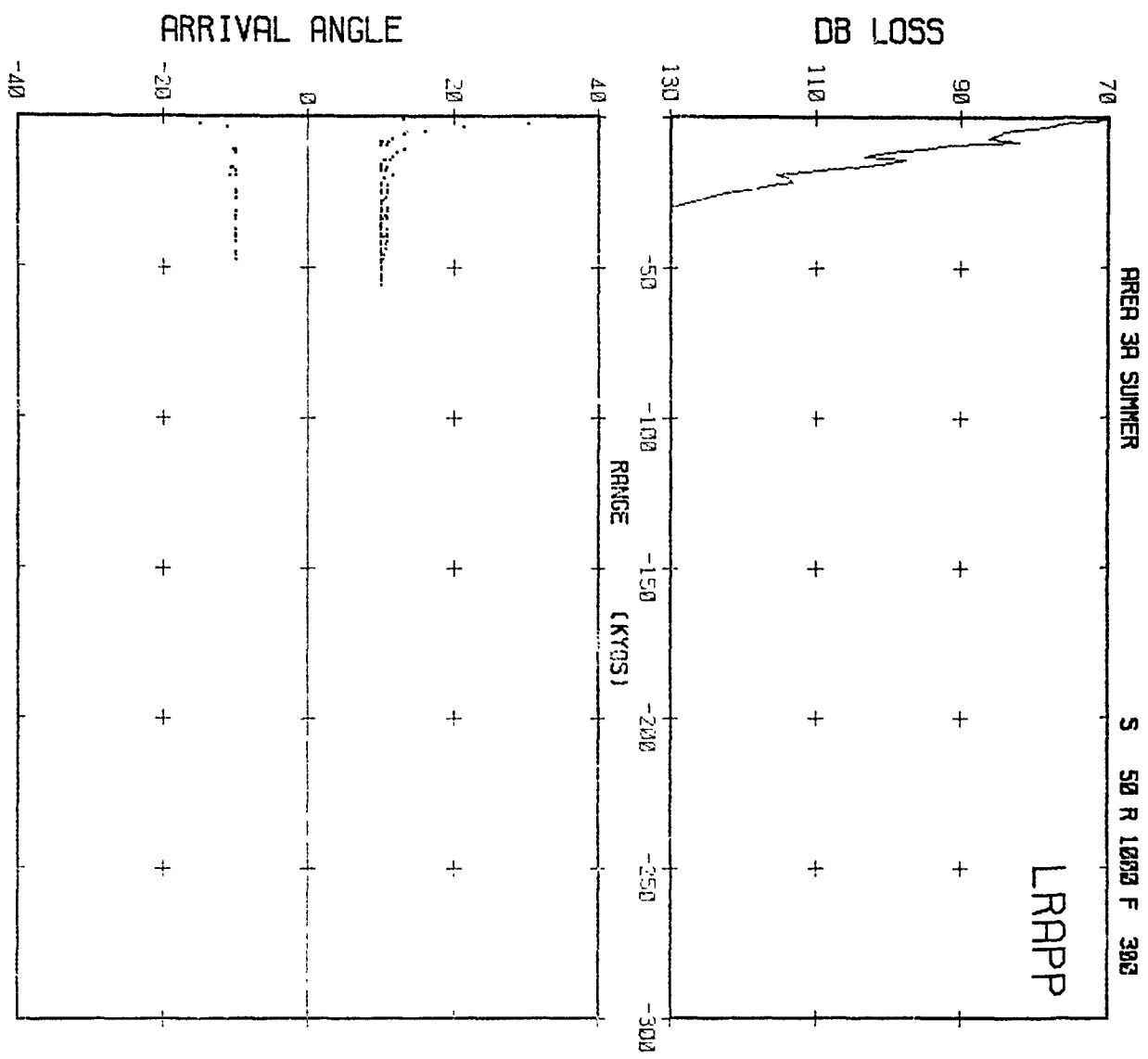


DEPTH IN METERS



NOISE (DB)



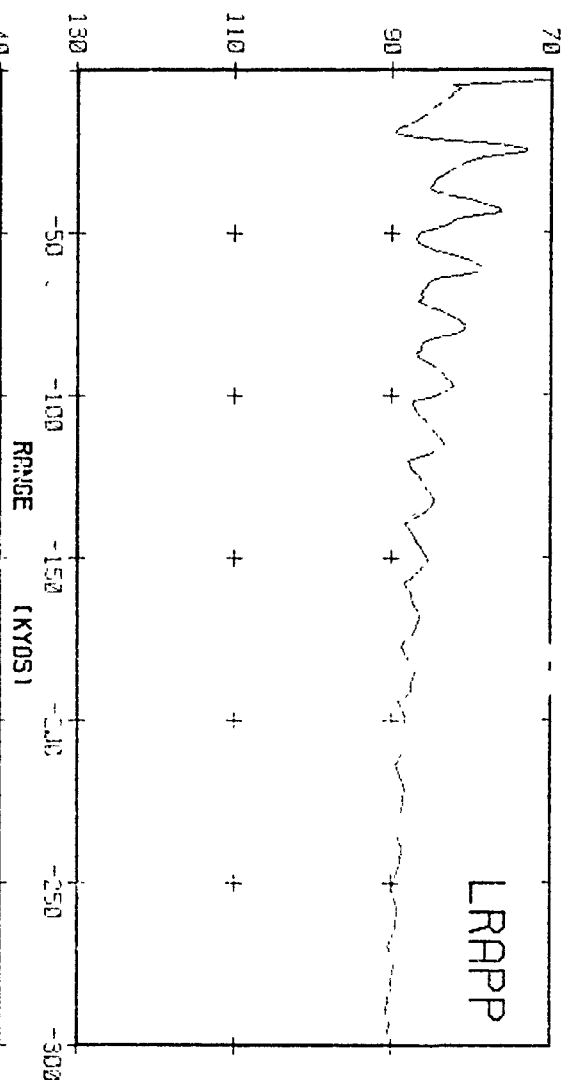


RRR 3A SUMMER

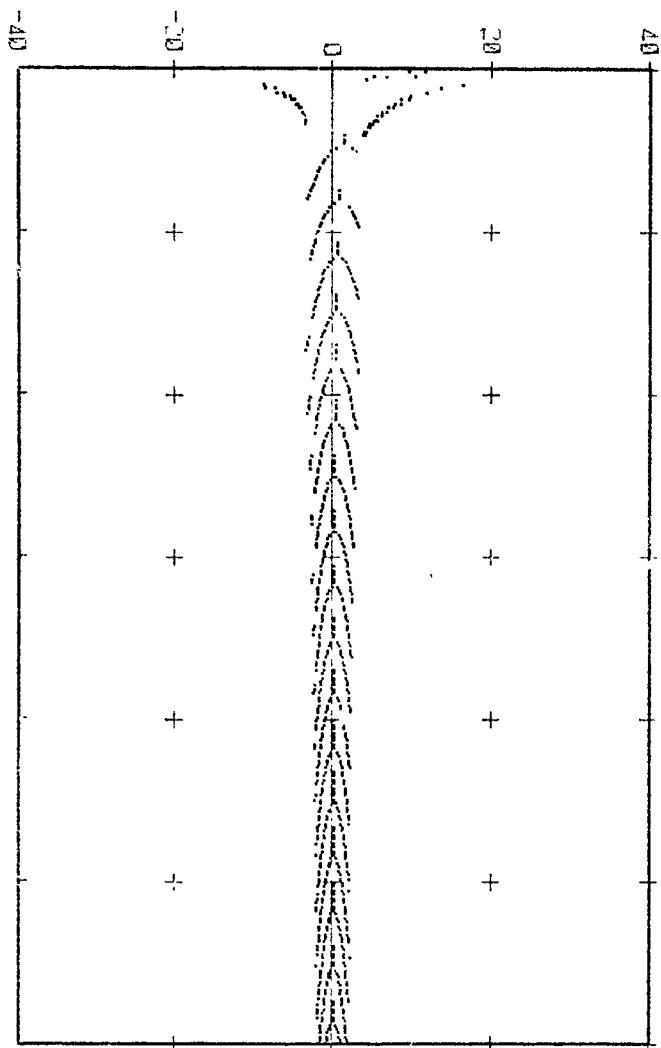
S 233 R 1030 F 300

1450 M/S 1500 1550

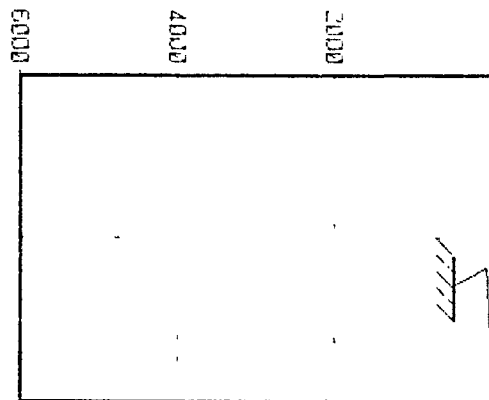
DB LOSS



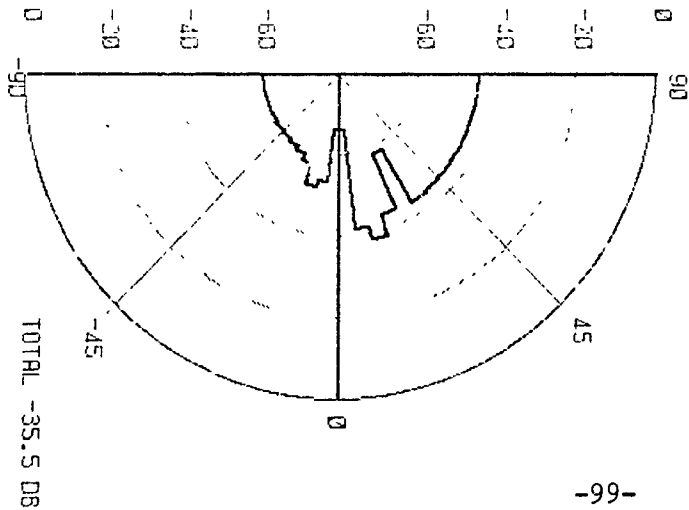
ARRIVAL ANGLE

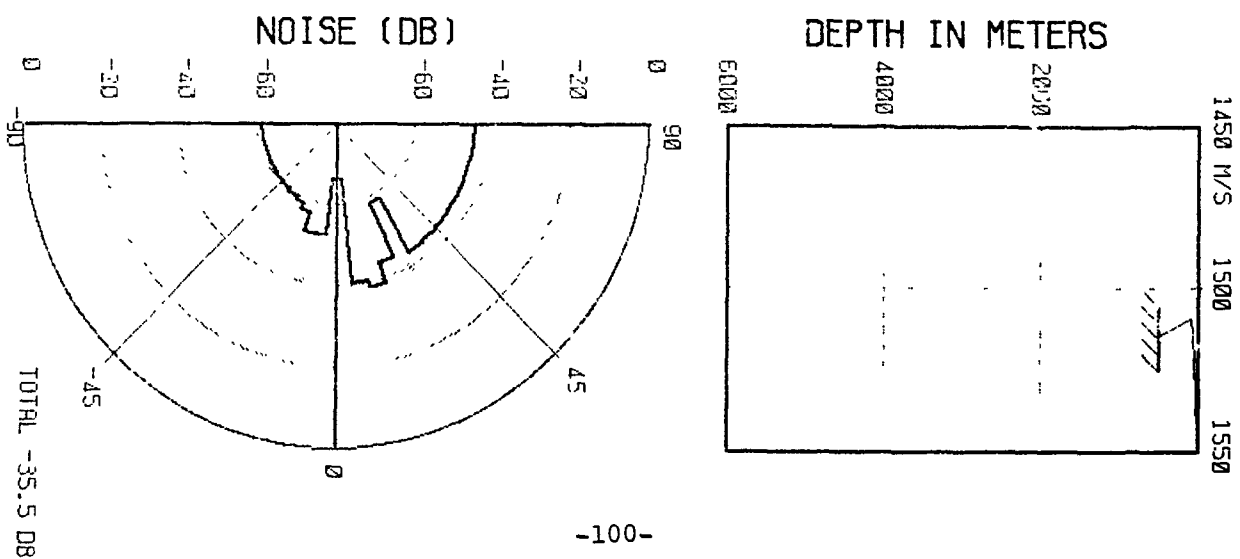
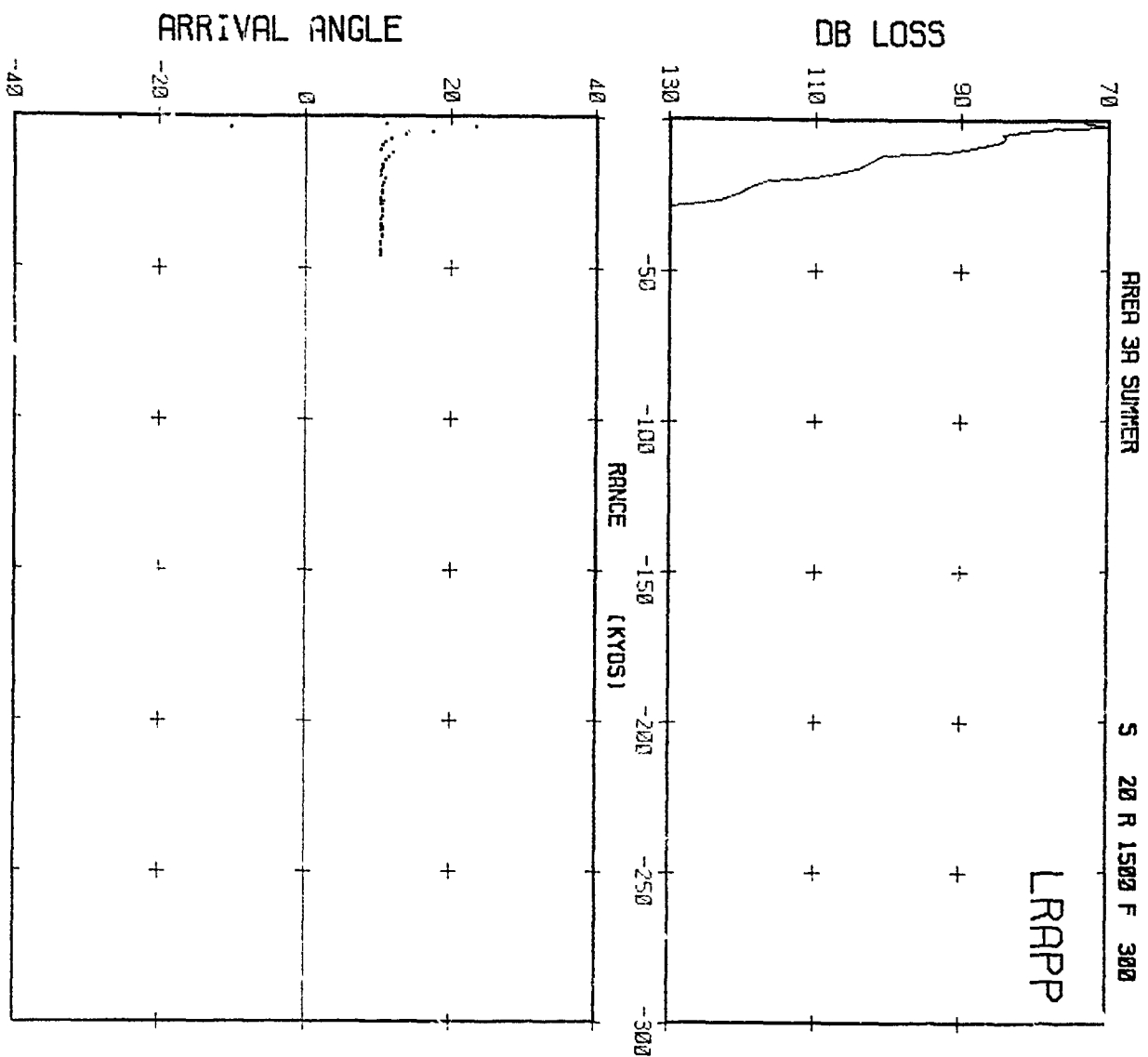


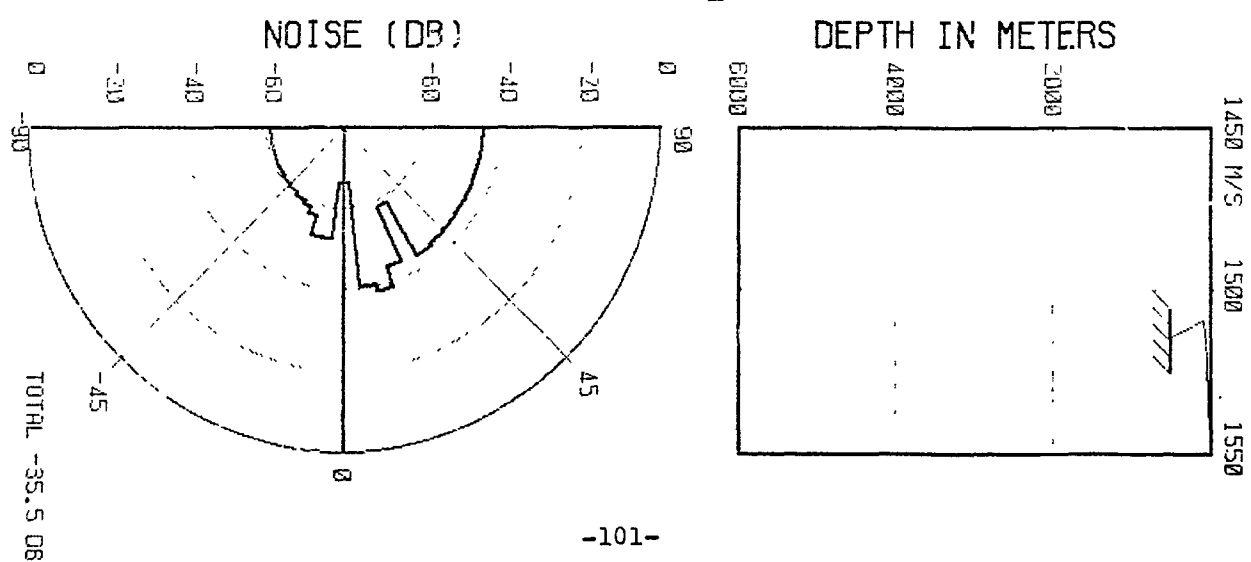
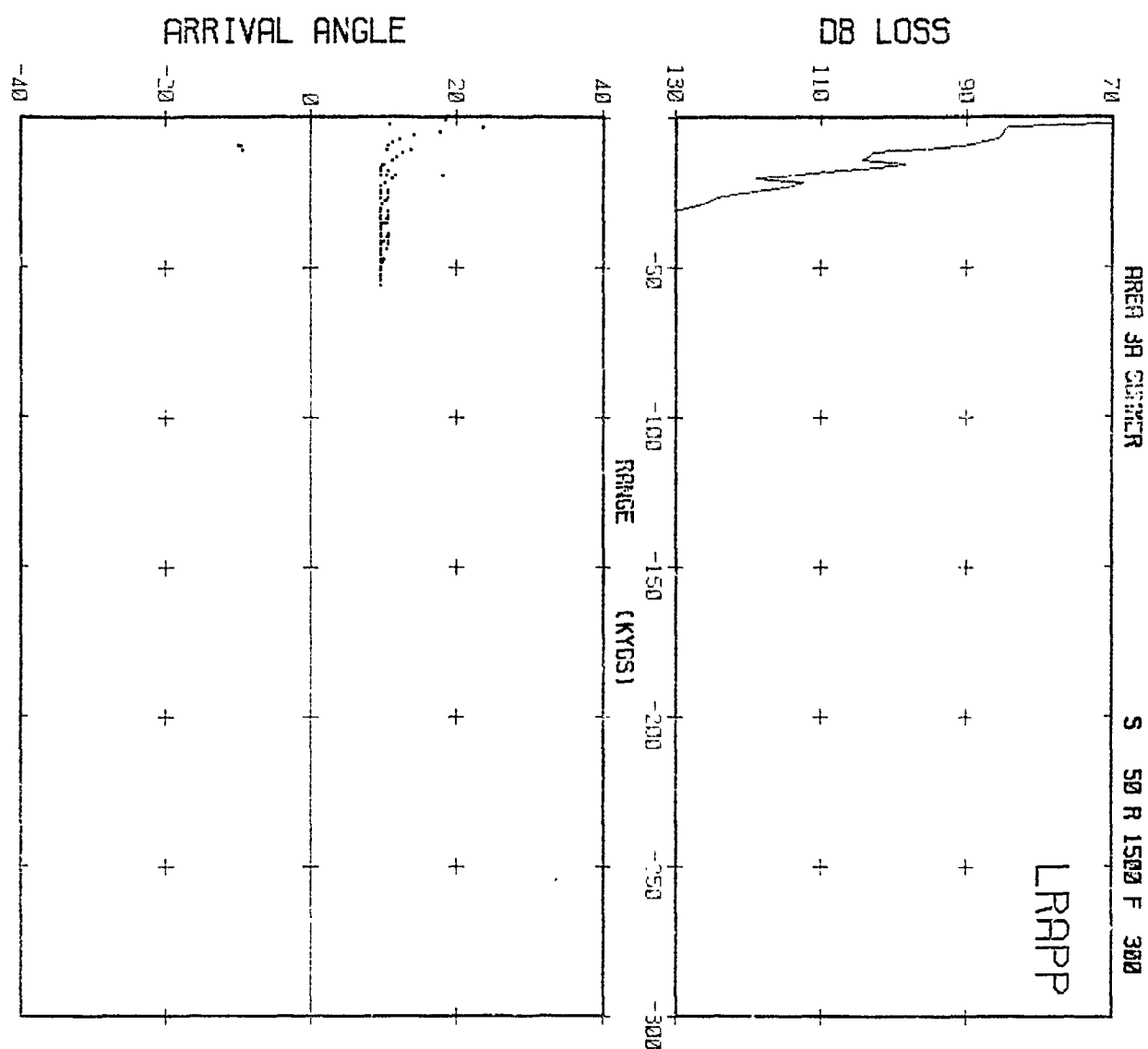
DEPTH IN METERS

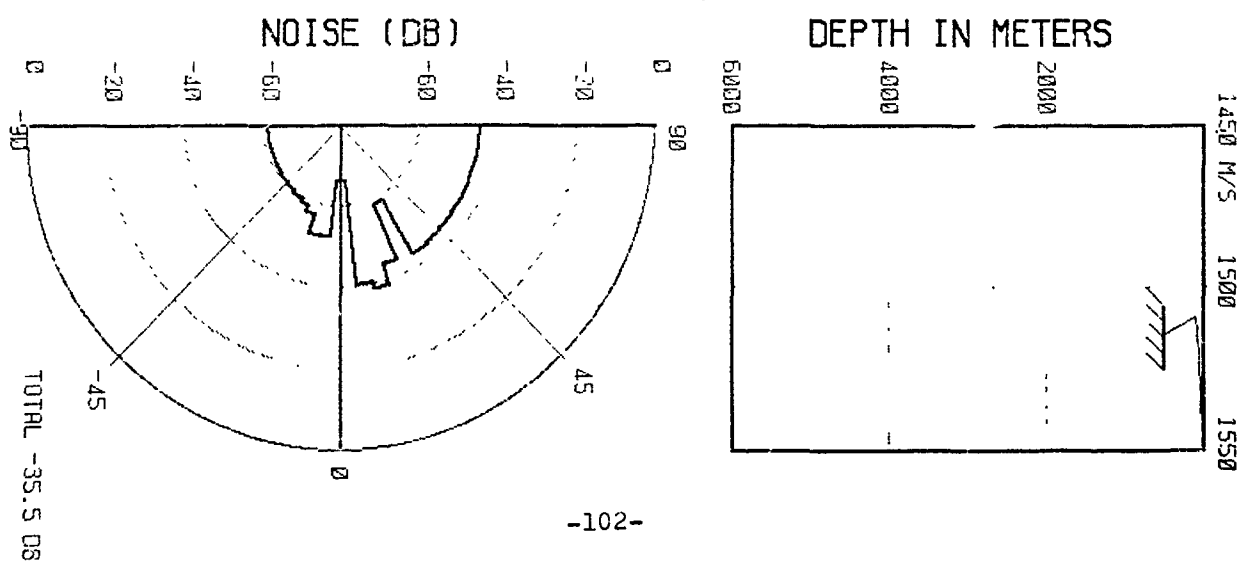
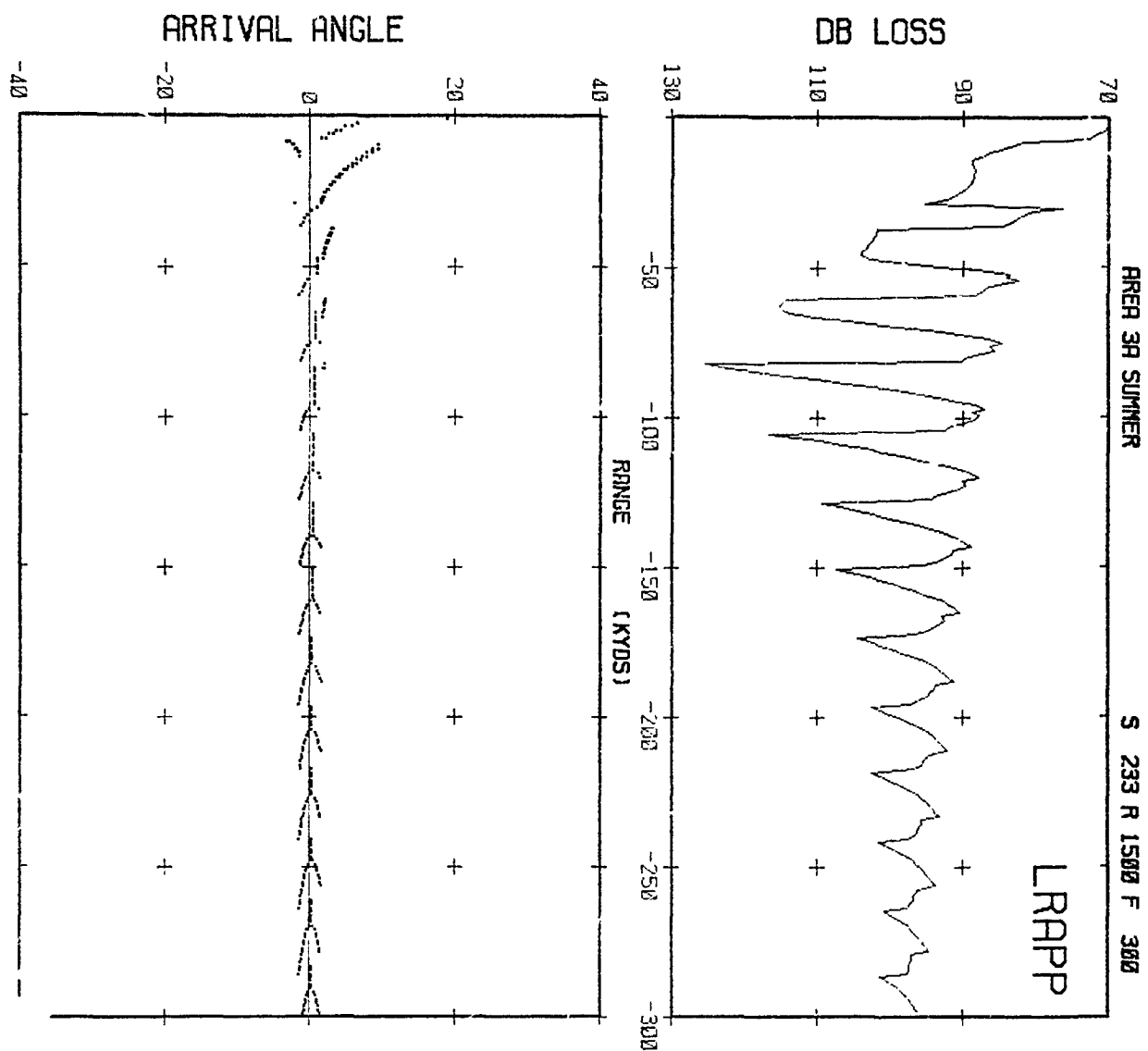


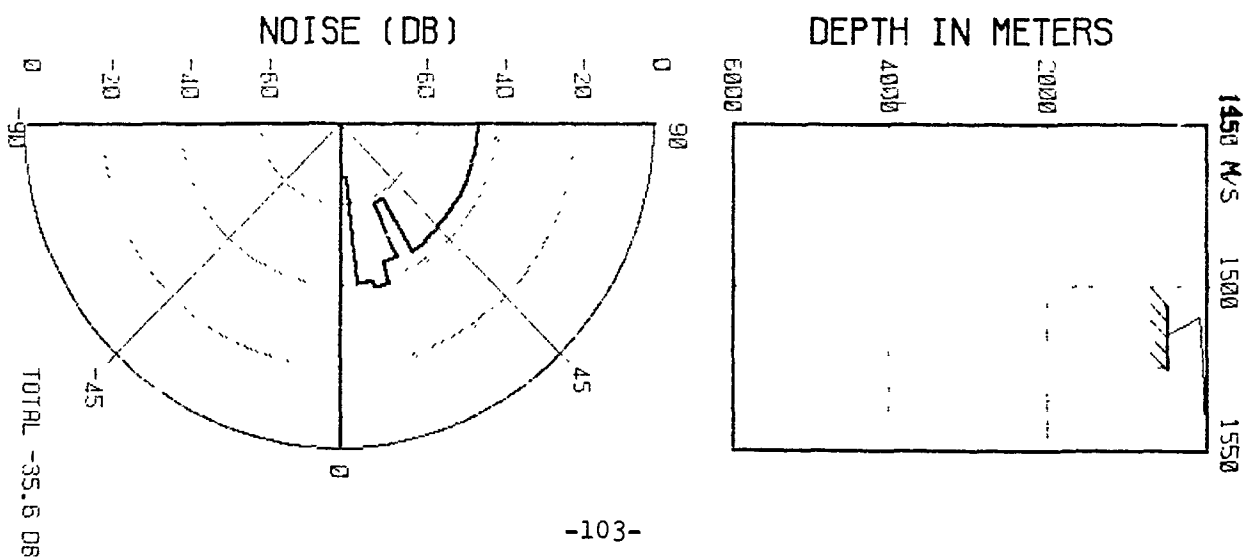
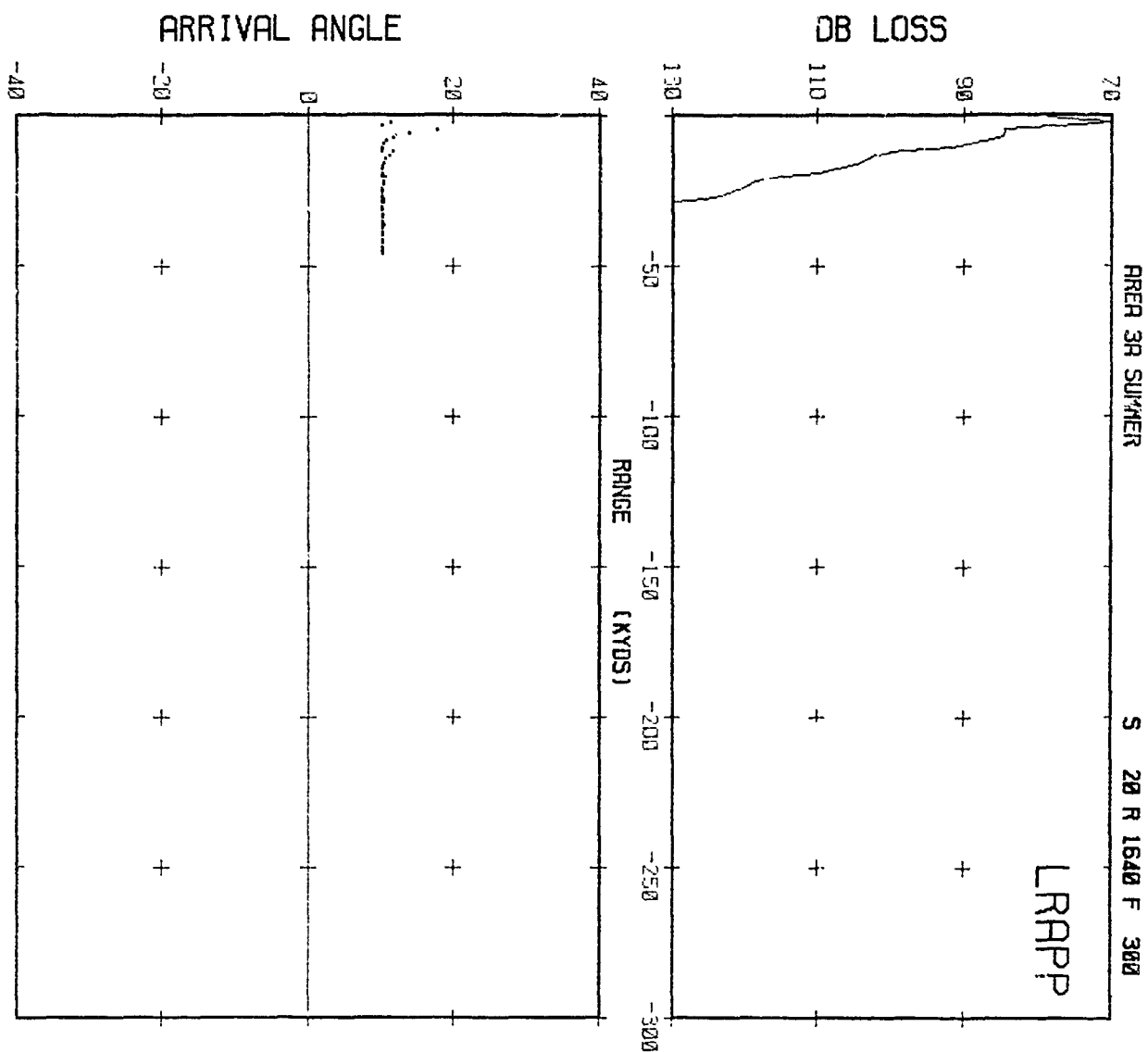
NOISE (DB)

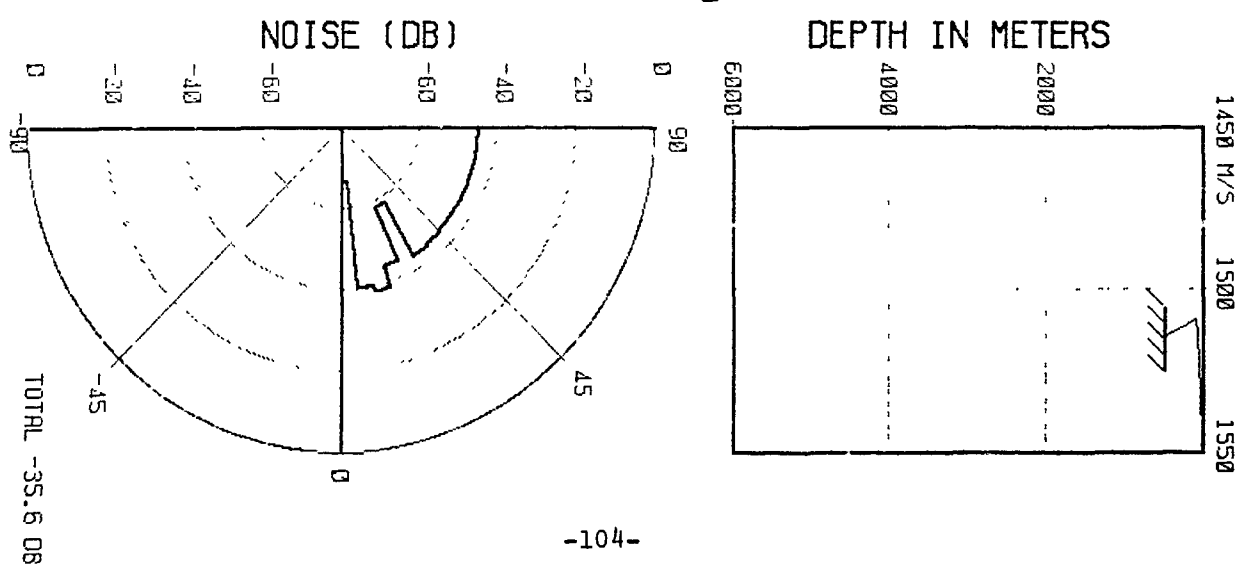
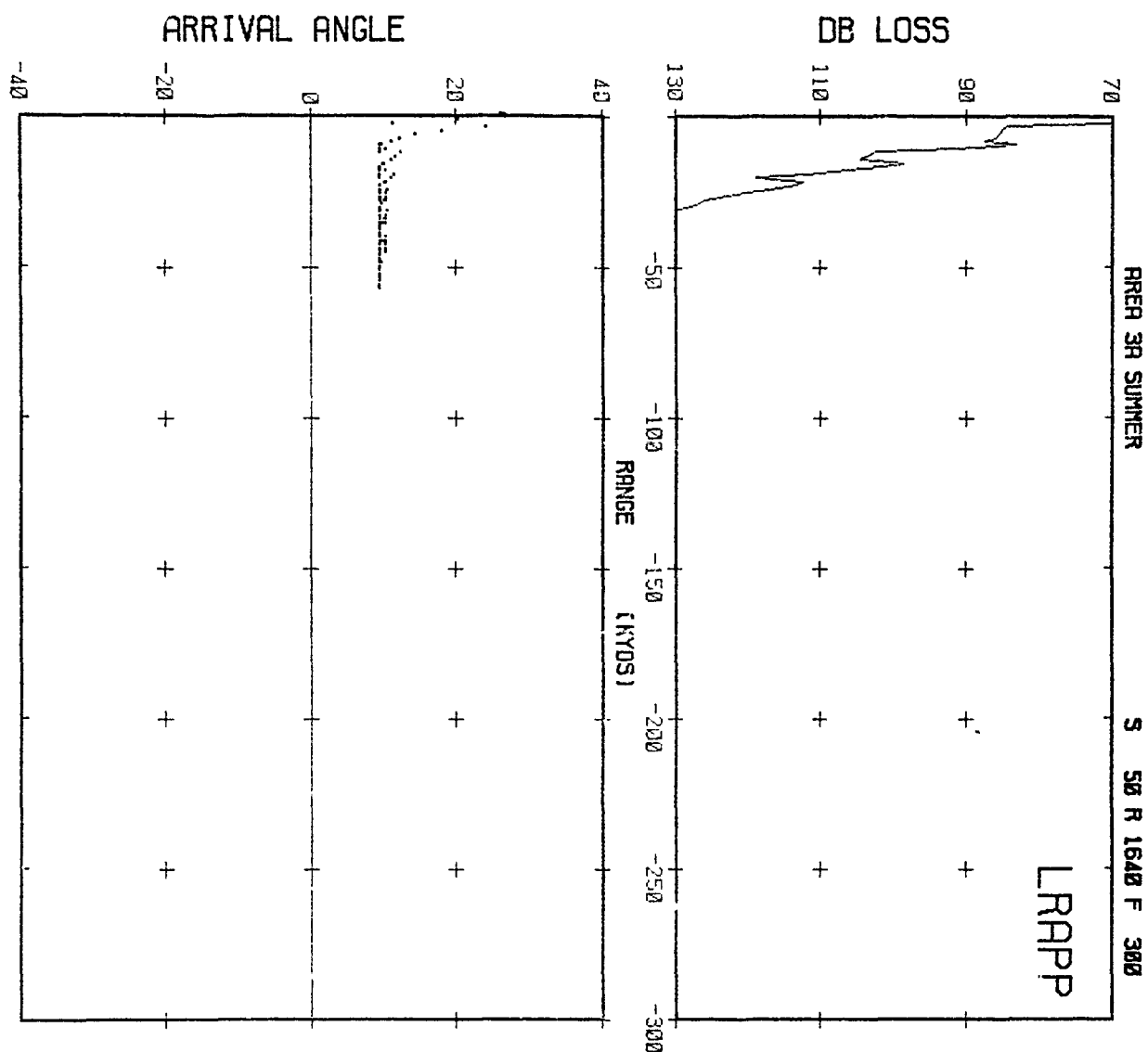










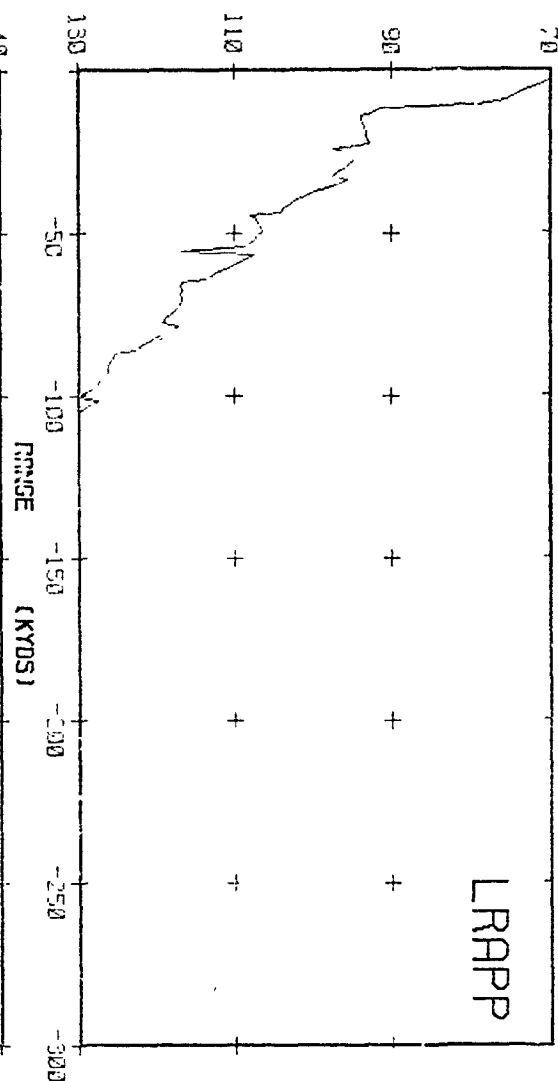


AREA 3A SUMNER

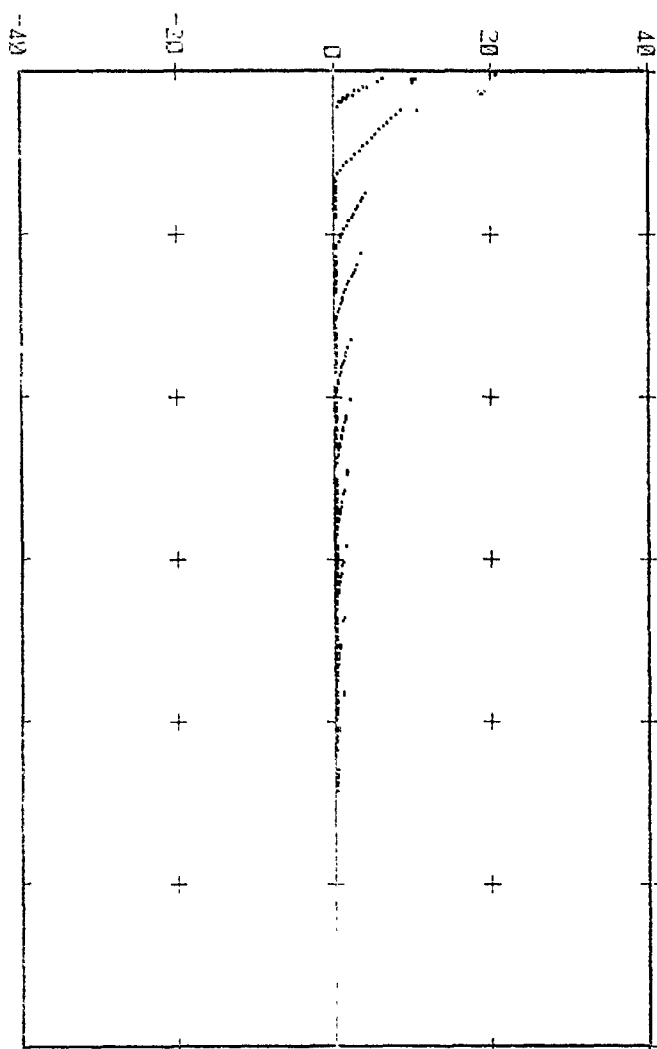
S 233 R 1640 F 300

1450 M/S 1500 1550

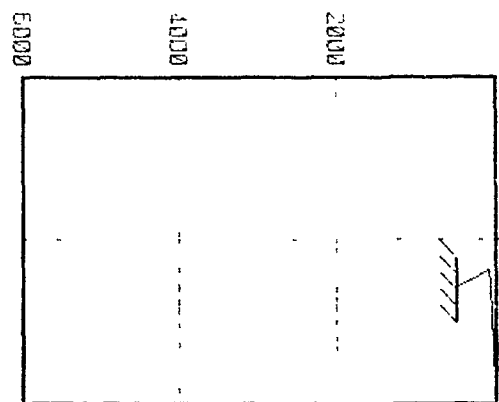
DB LOSS



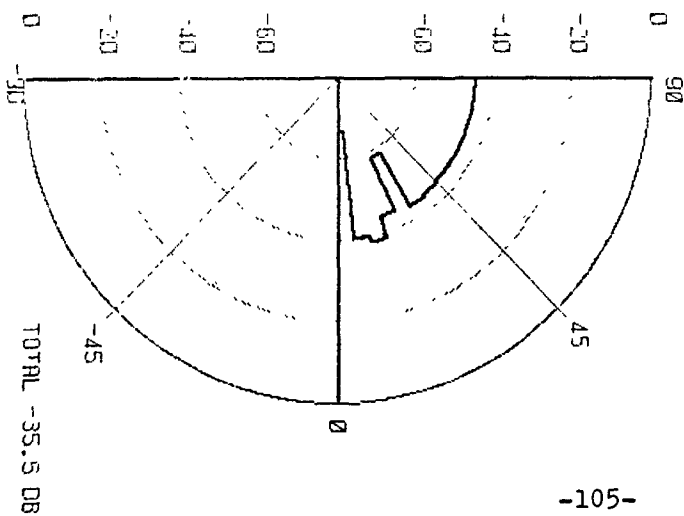
ARRIVAL ANGLE

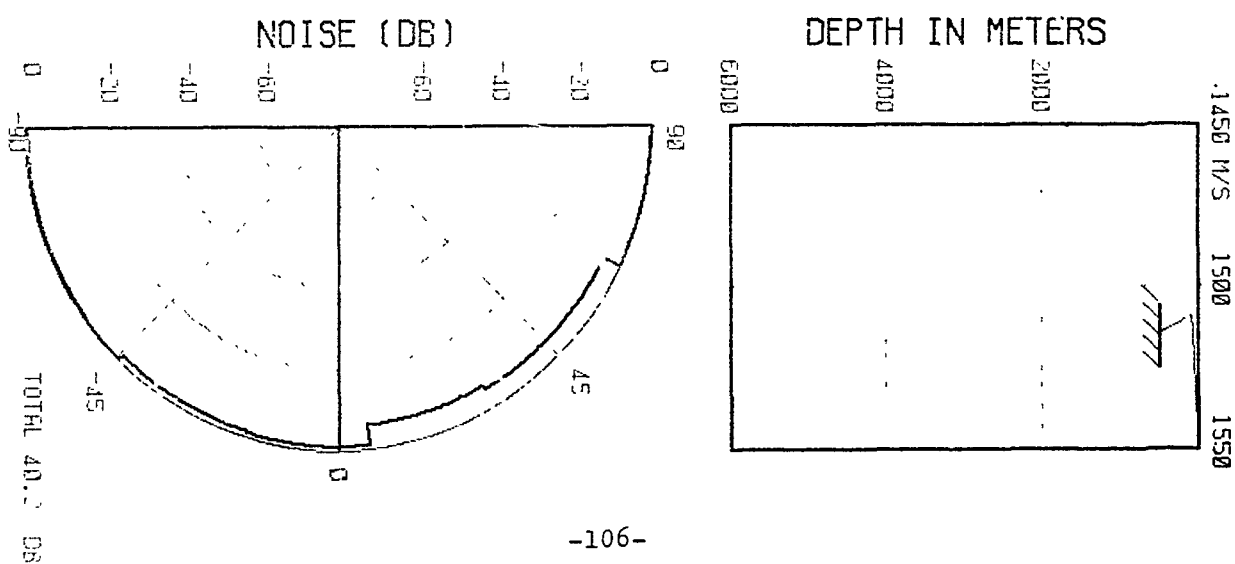
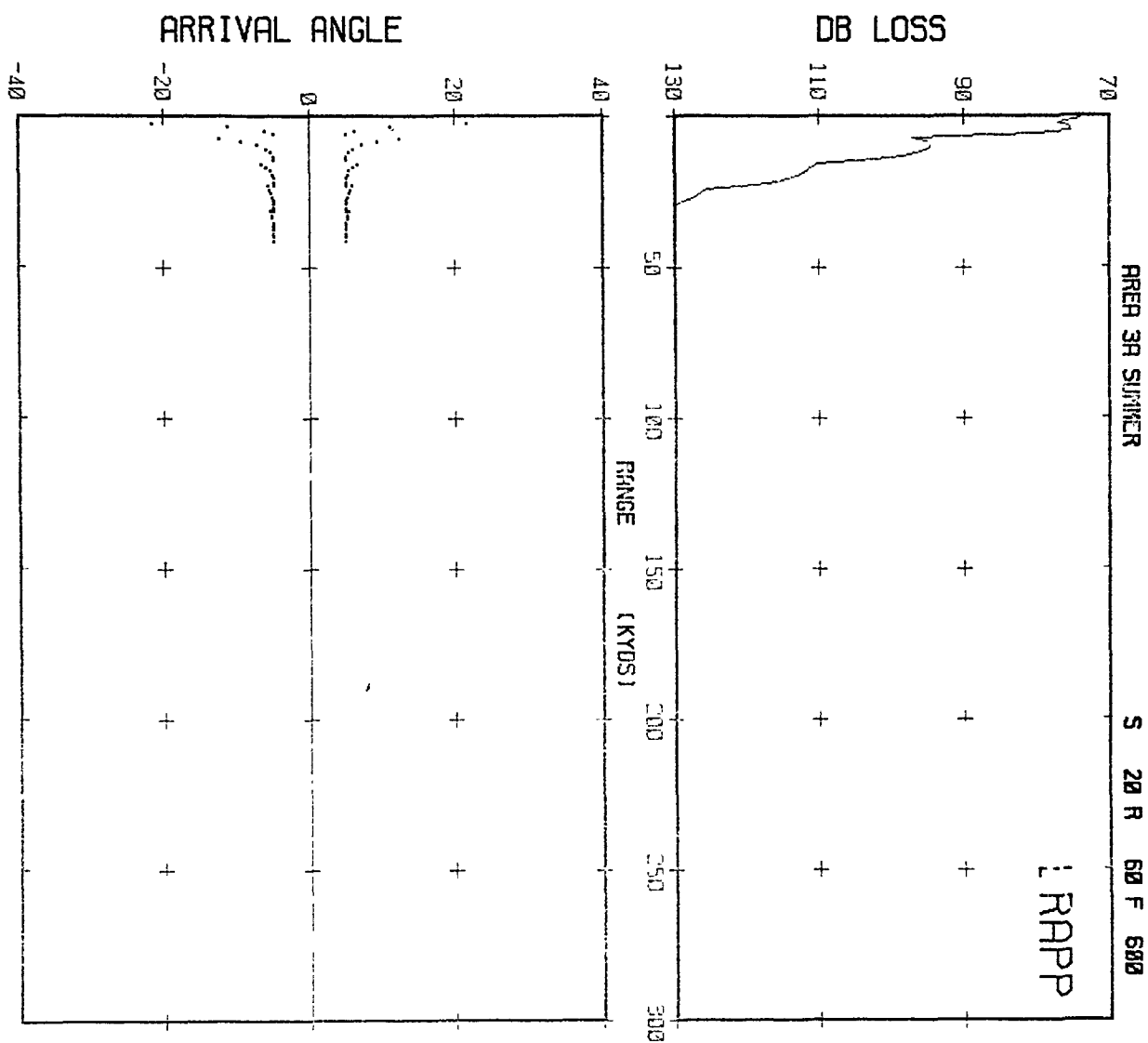


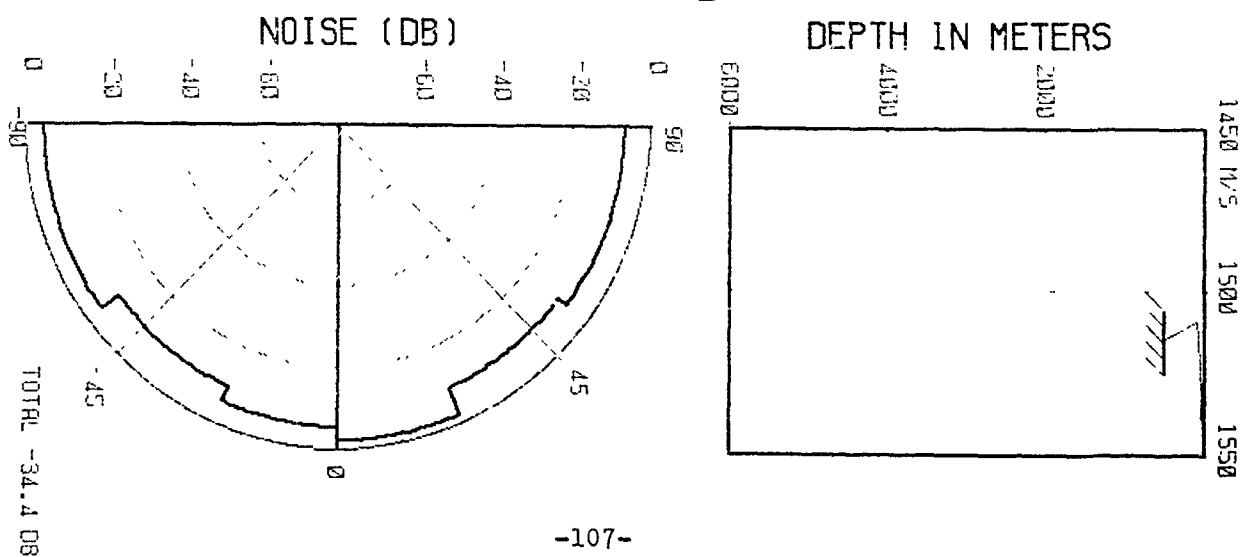
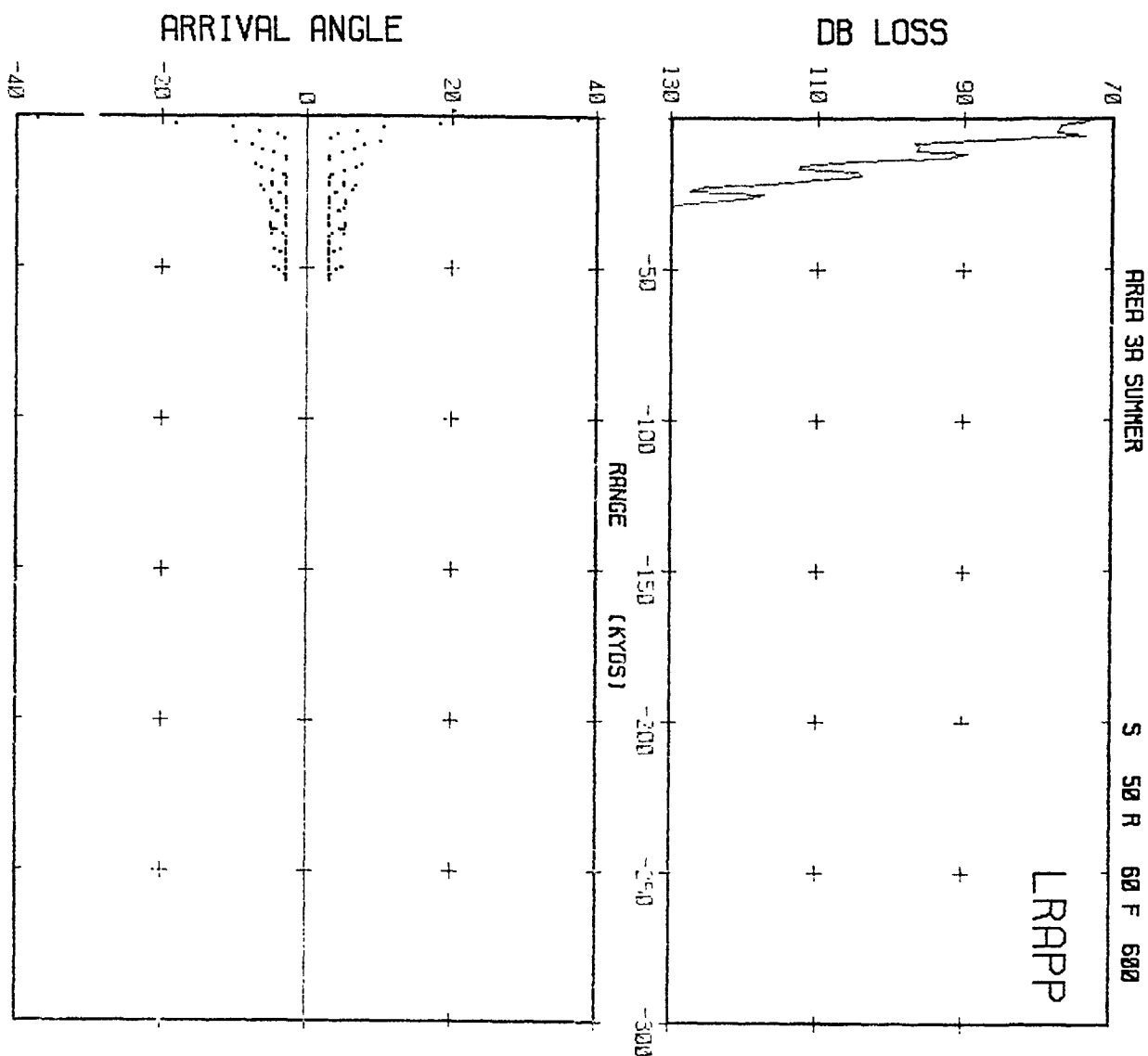
DEPTH IN METERS

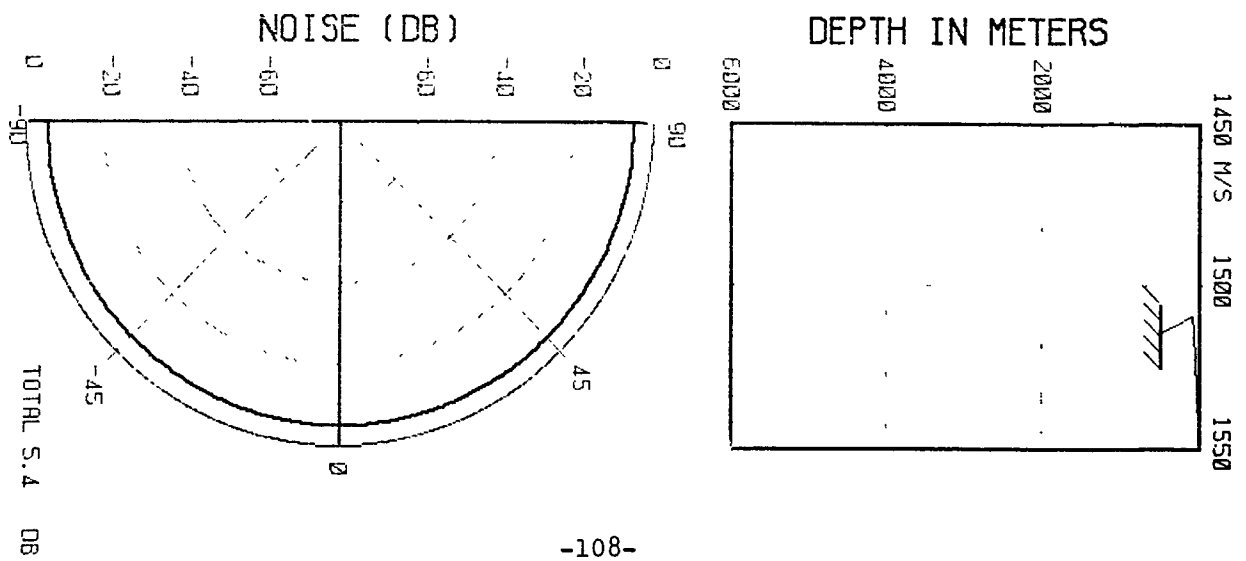
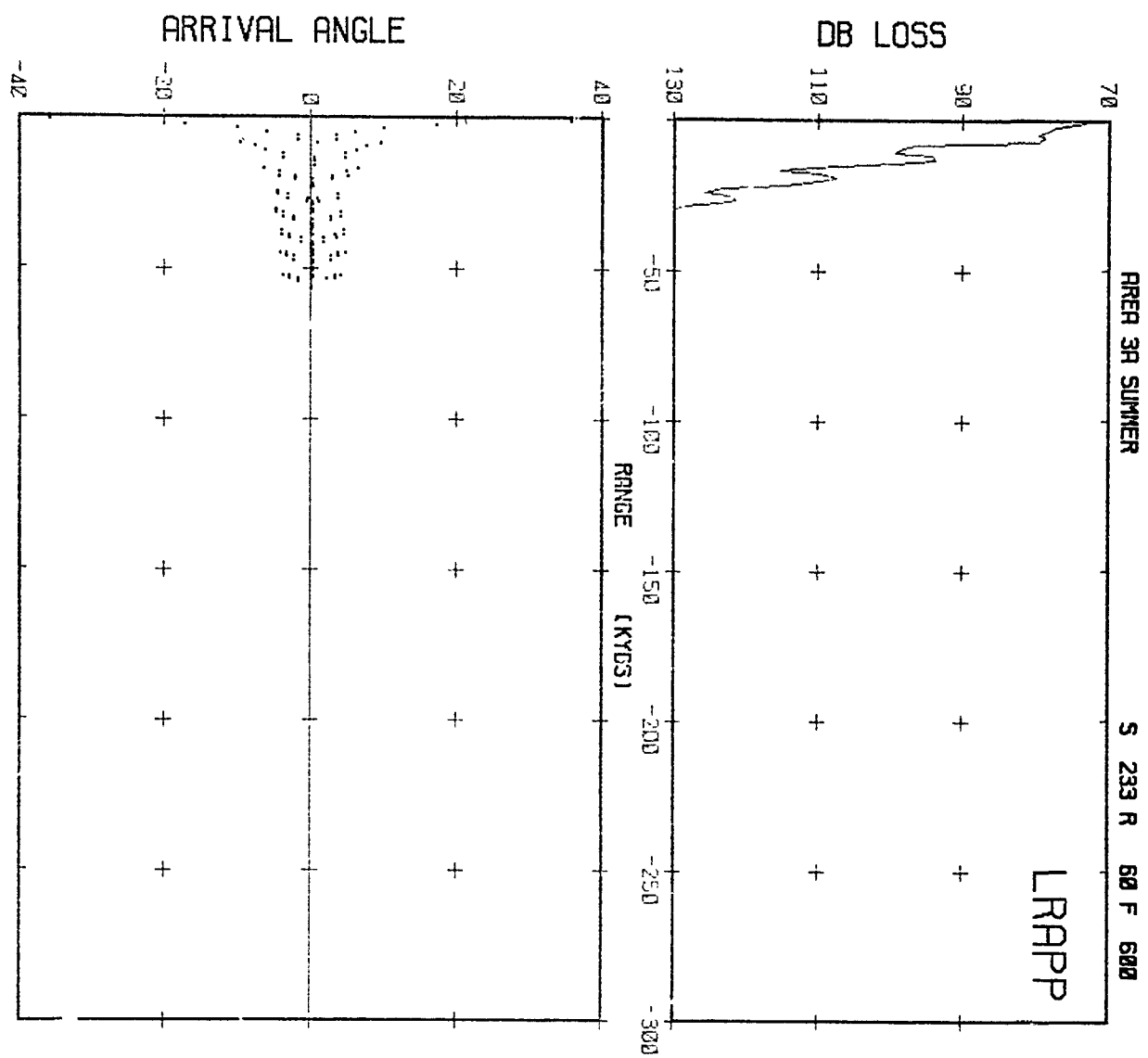


NOISE (DB)







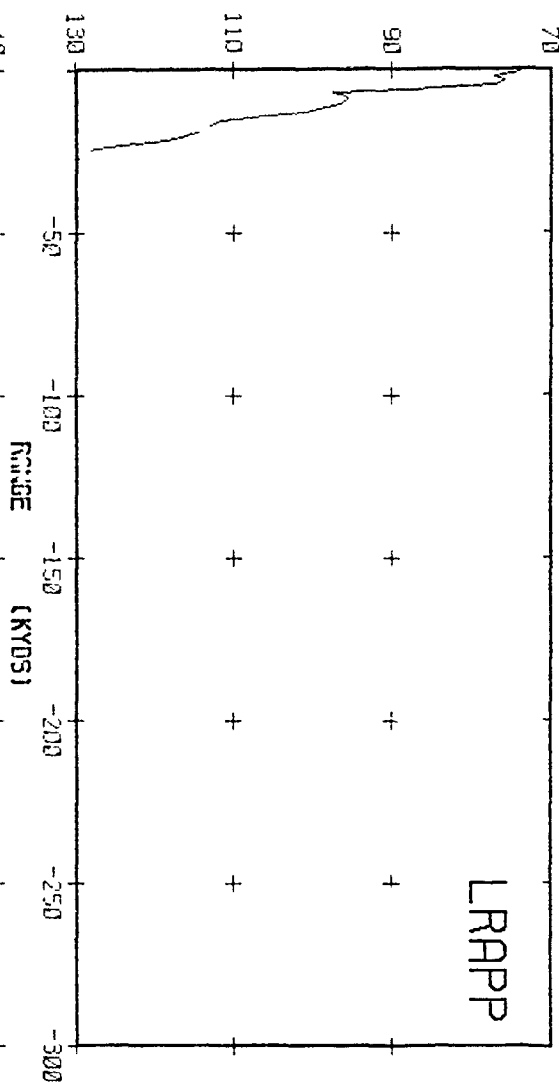


AREA 3A SUMMER

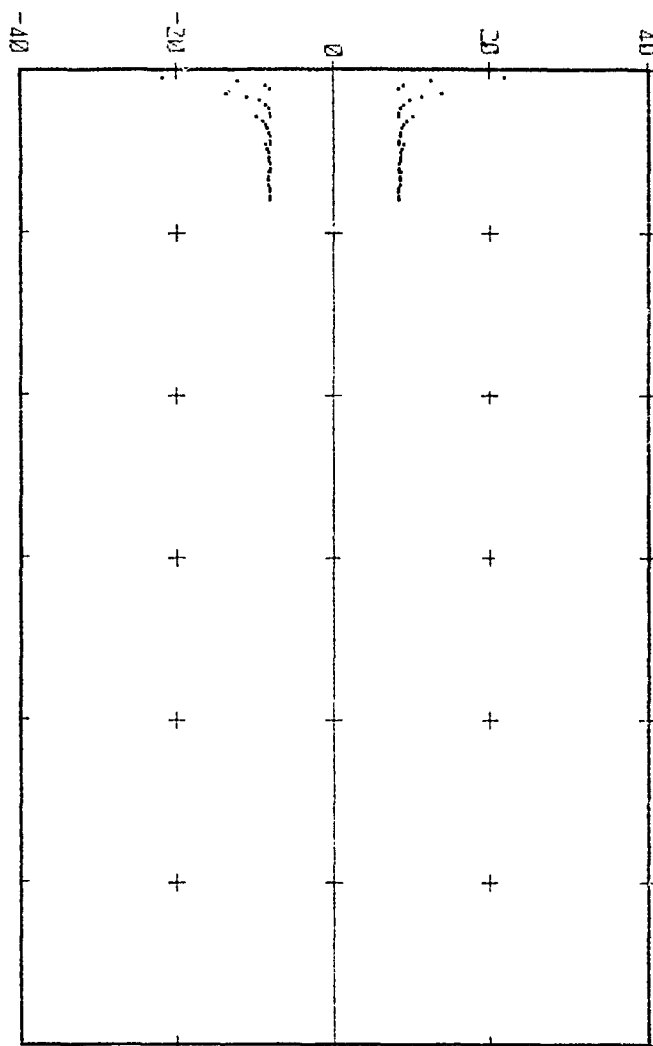
S 20 R 133 F 600

1450 M/S 1500 1550

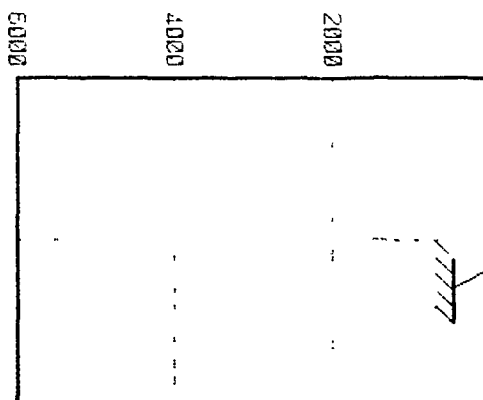
DB LOSS



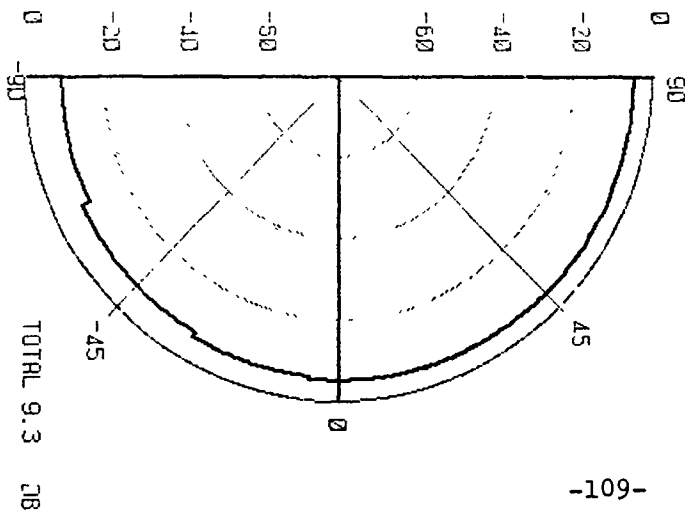
ARRIVAL ANGLE

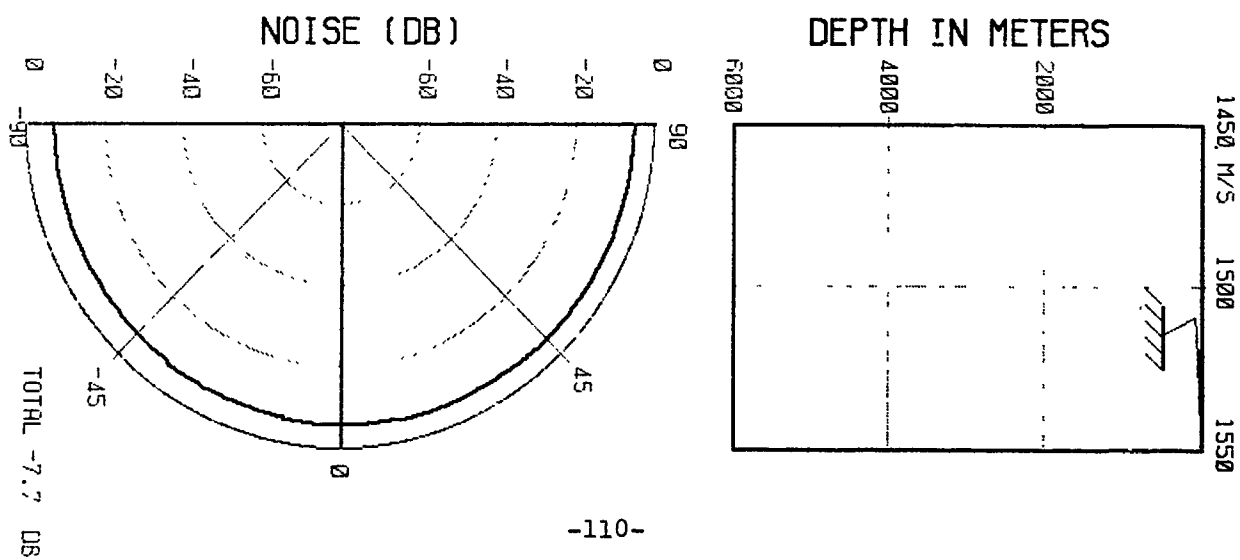
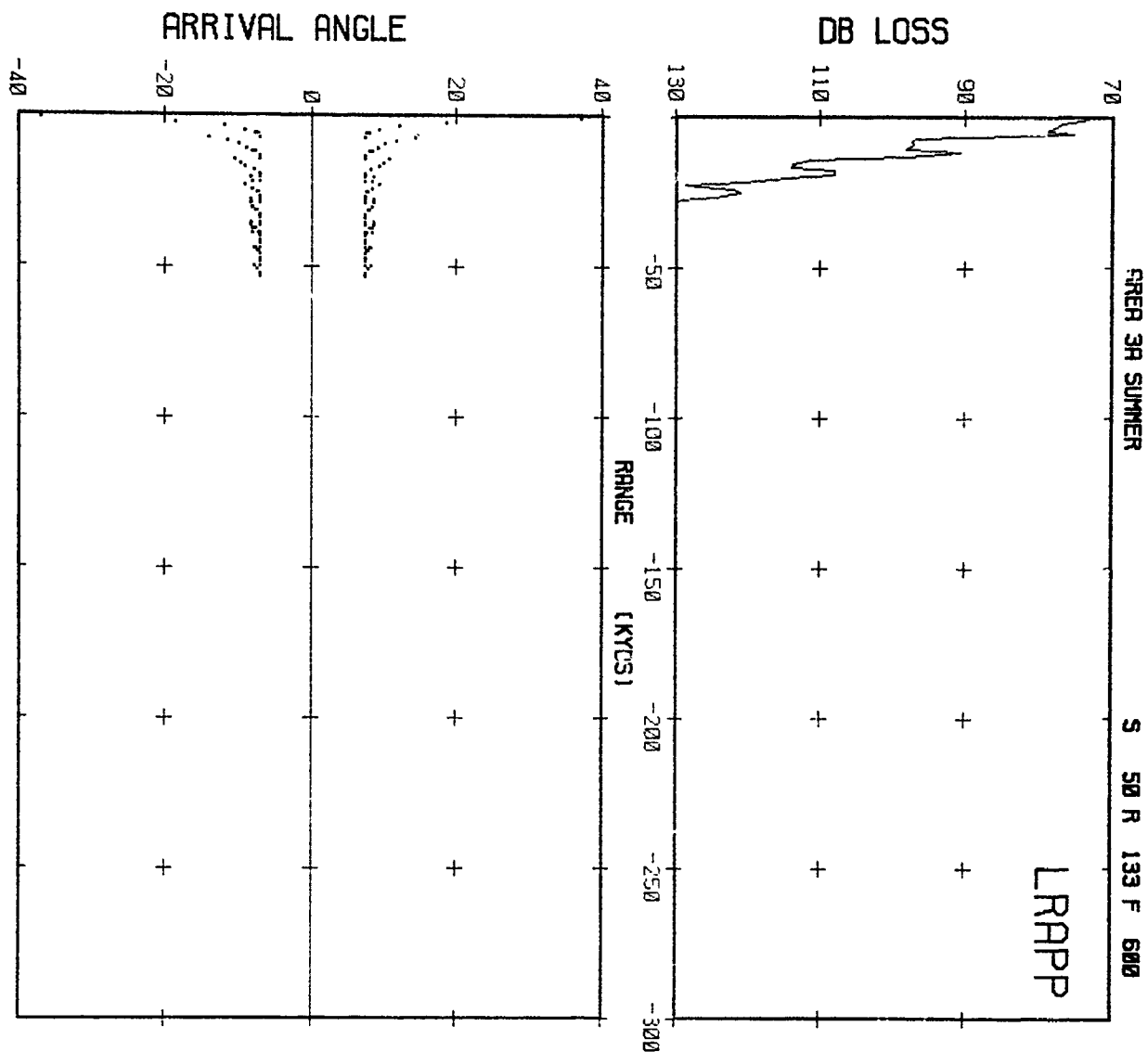


DEPTH IN METERS



NOISE (DB)



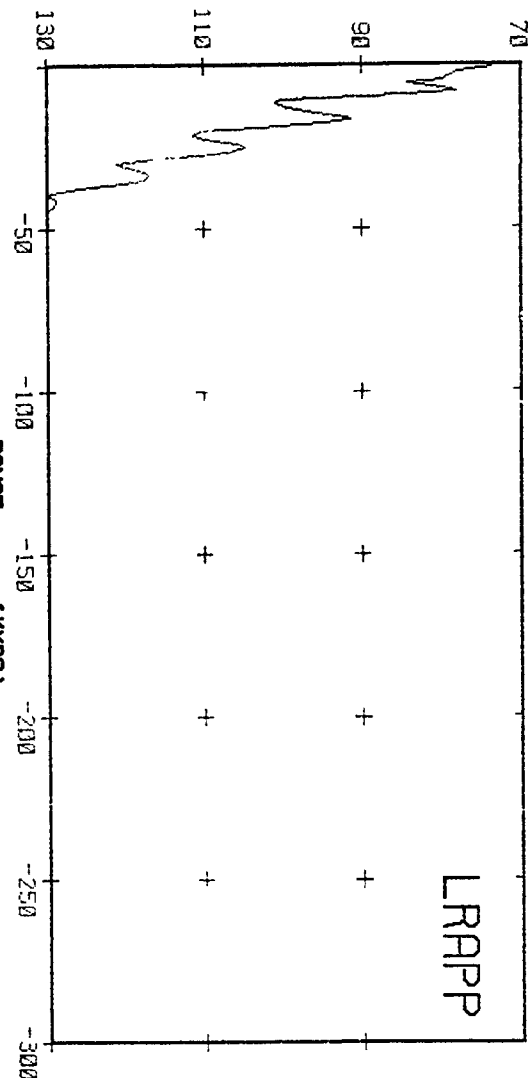


RRR 3R SUMMER

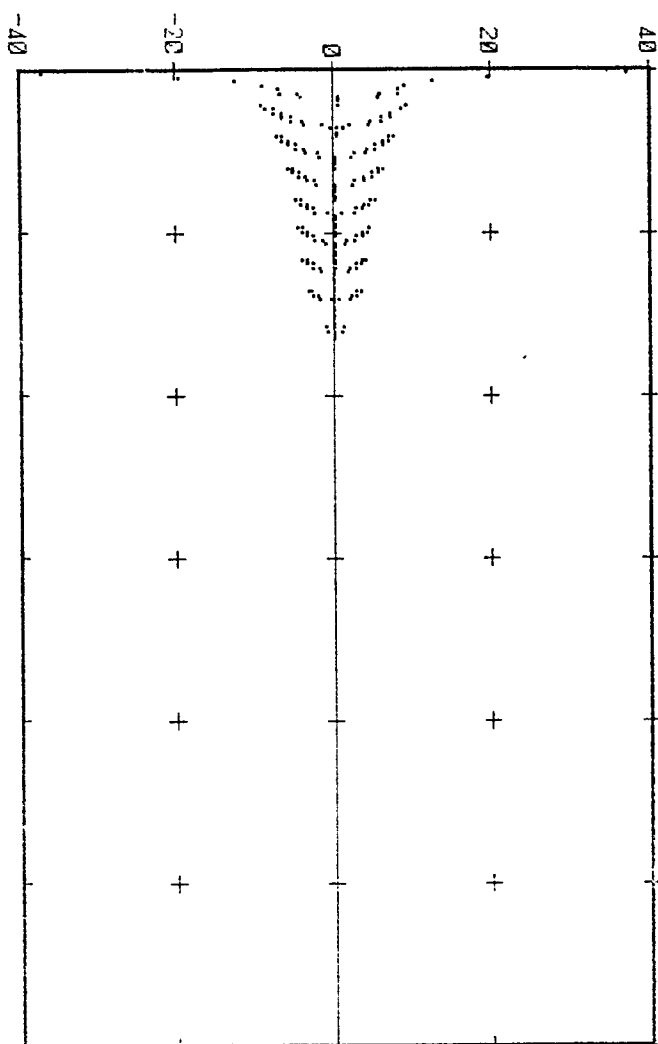
S 233 R 133 F 600

1450 M/S 1500 1550

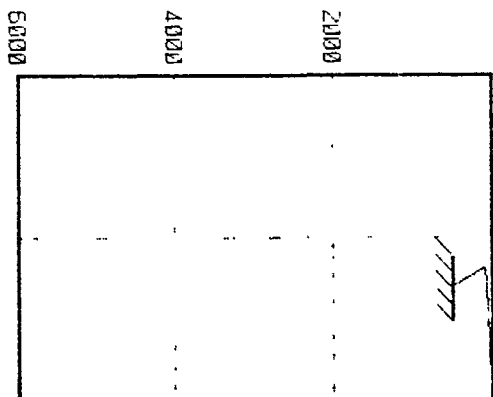
DB LOSS



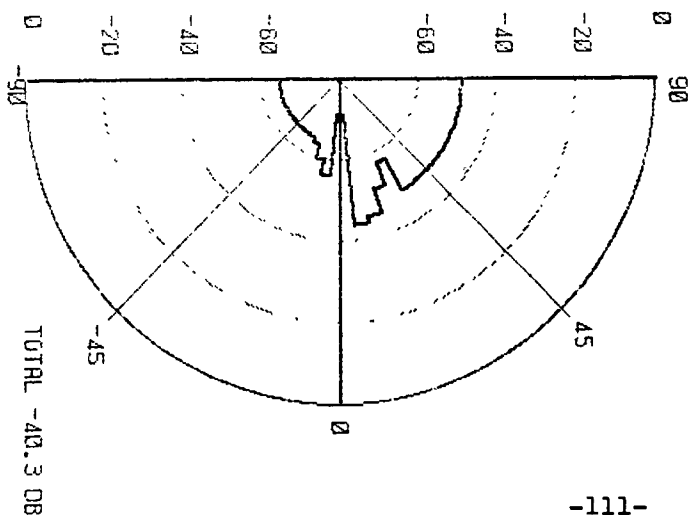
ARRIVAL ANGLE

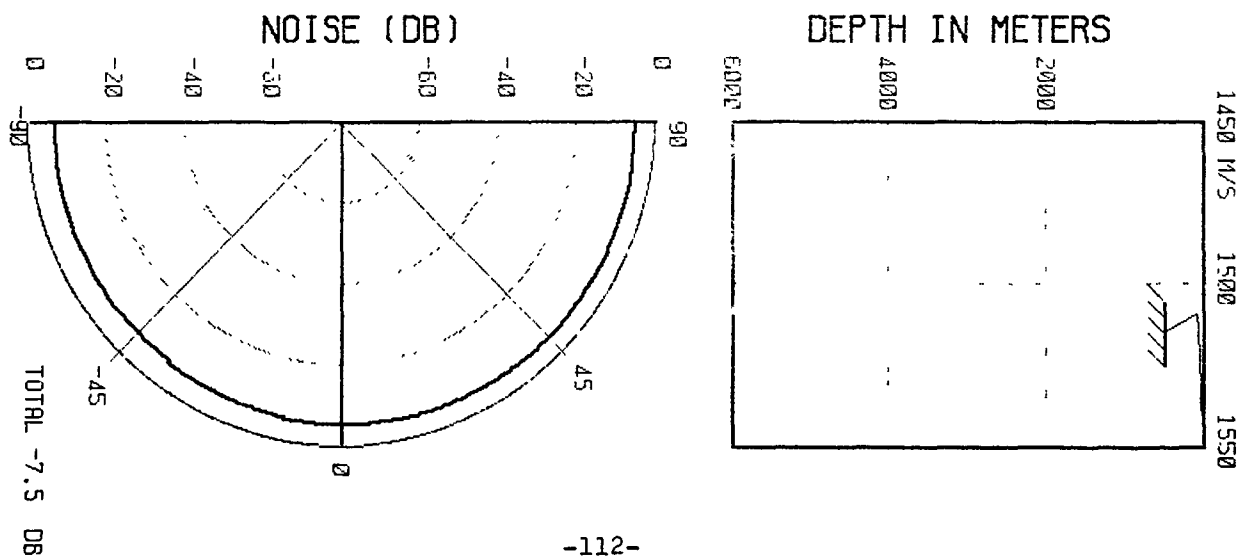
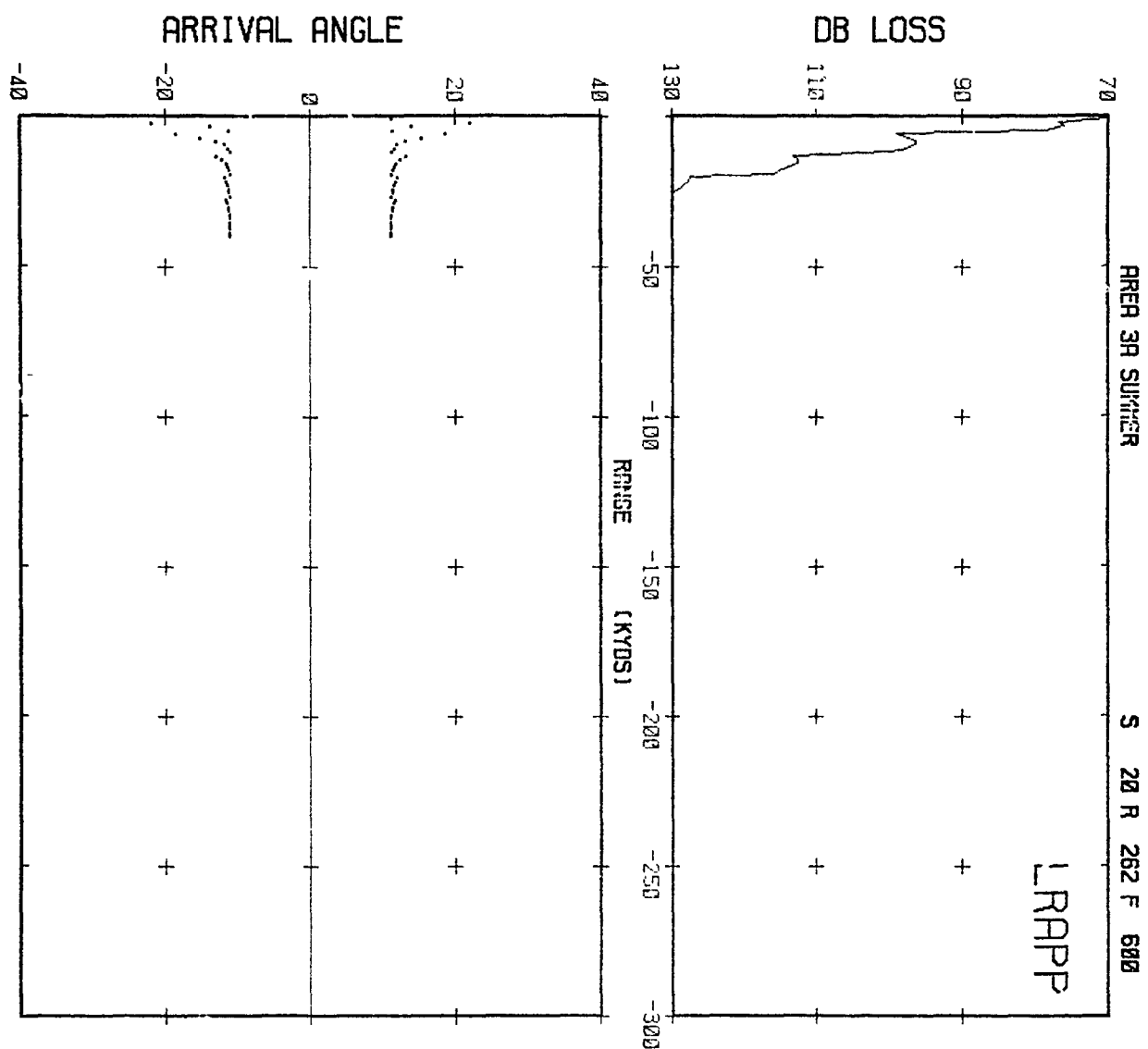


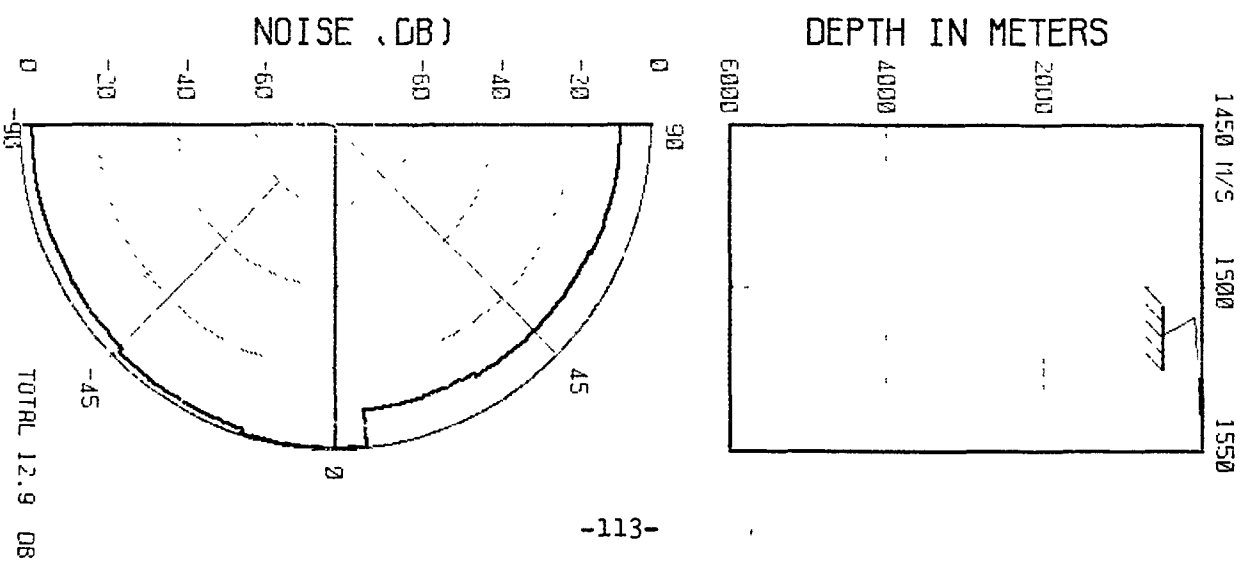
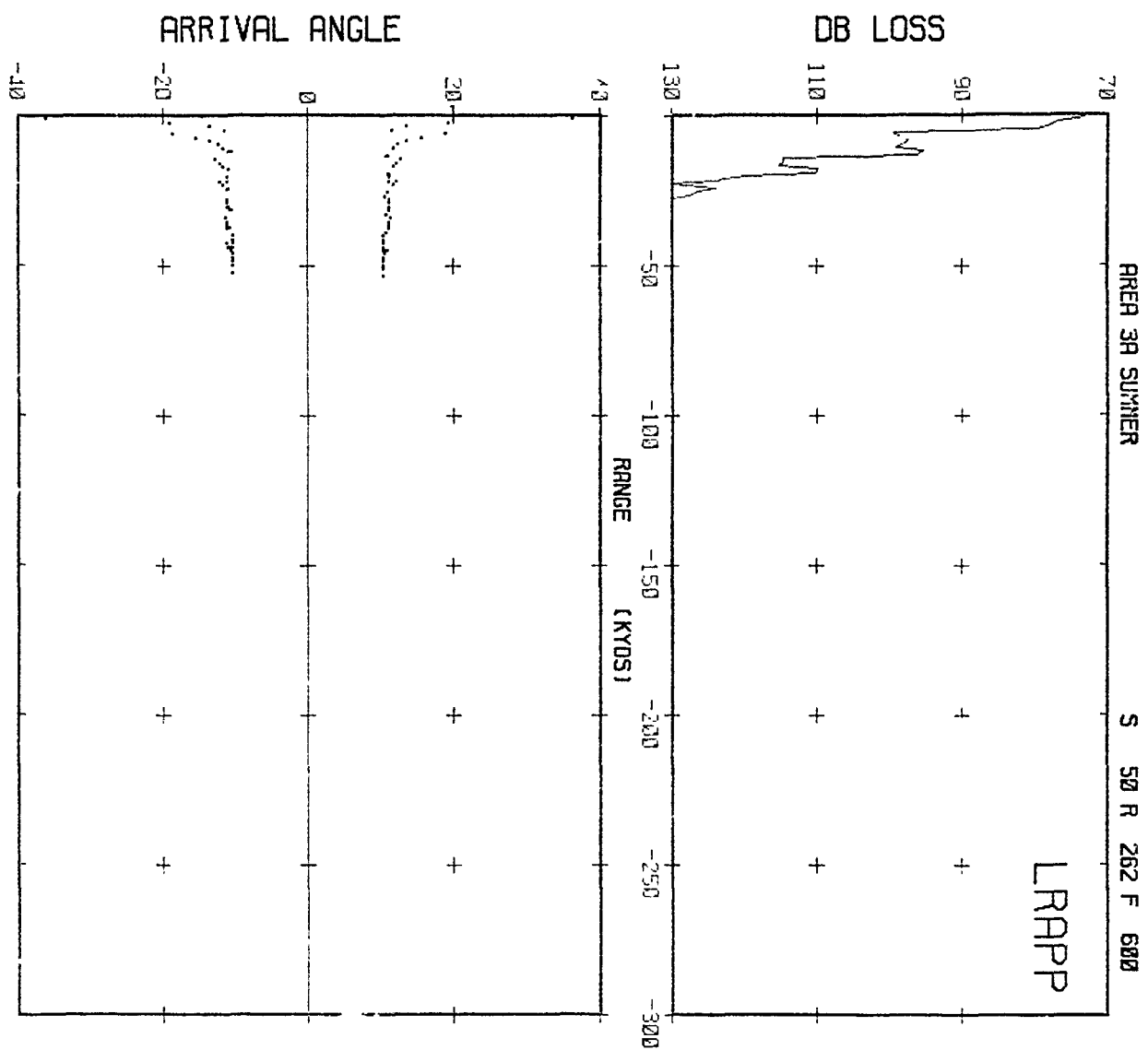
DEPTH IN METERS

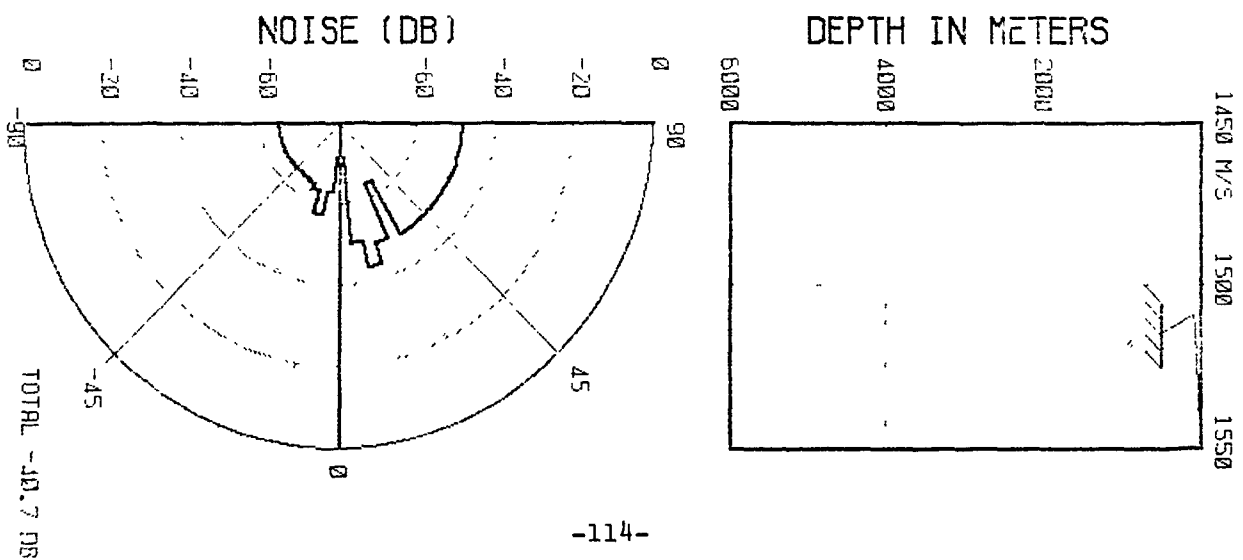
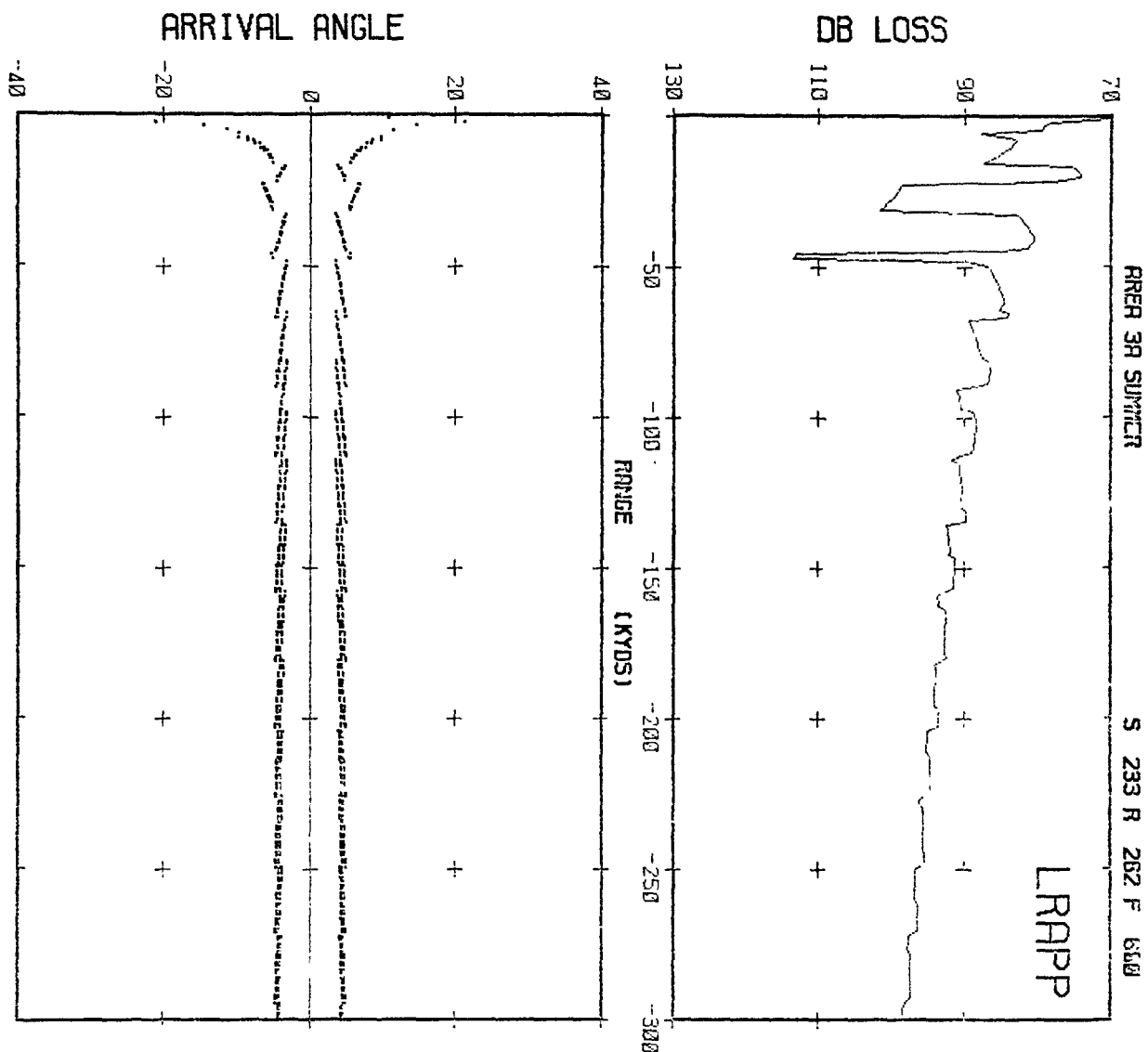


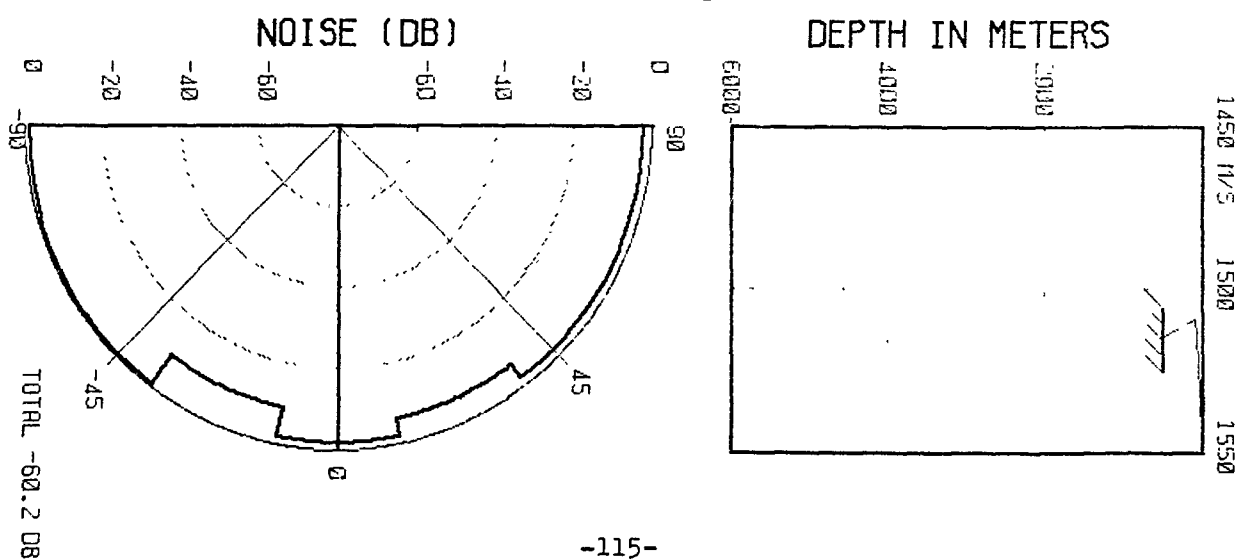
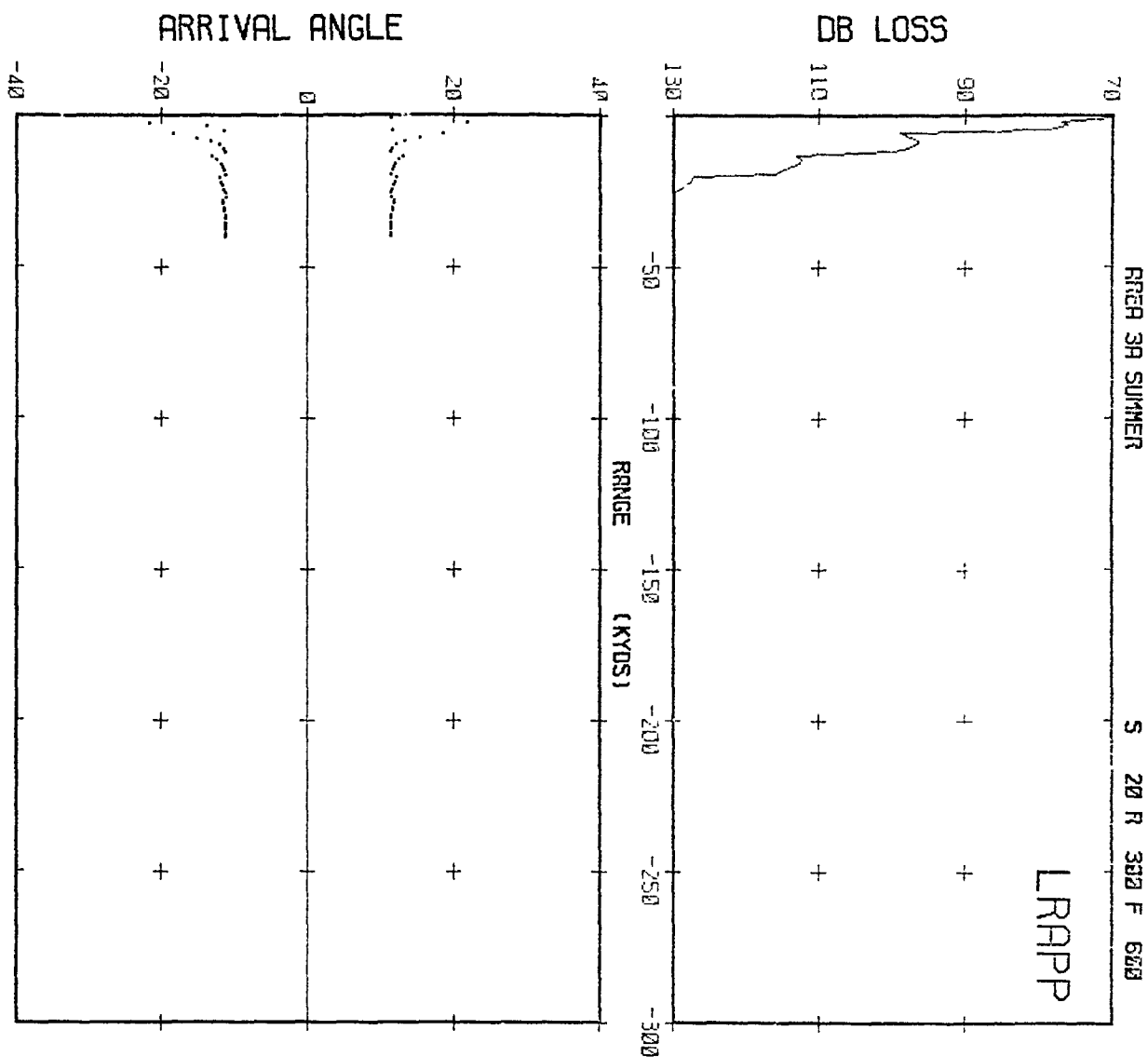
NOISE (DB)

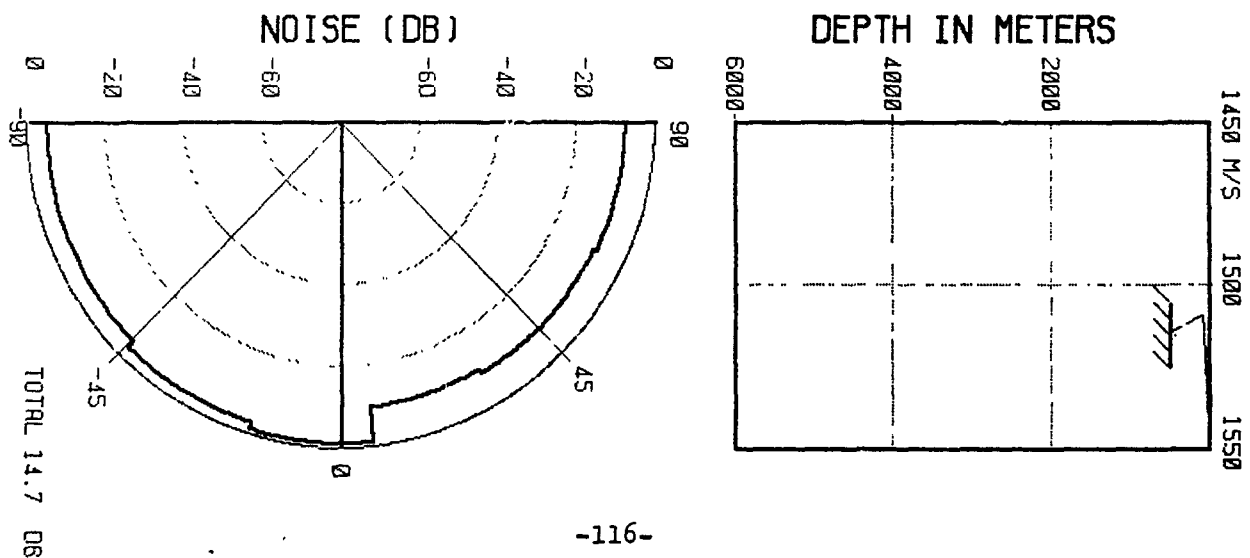
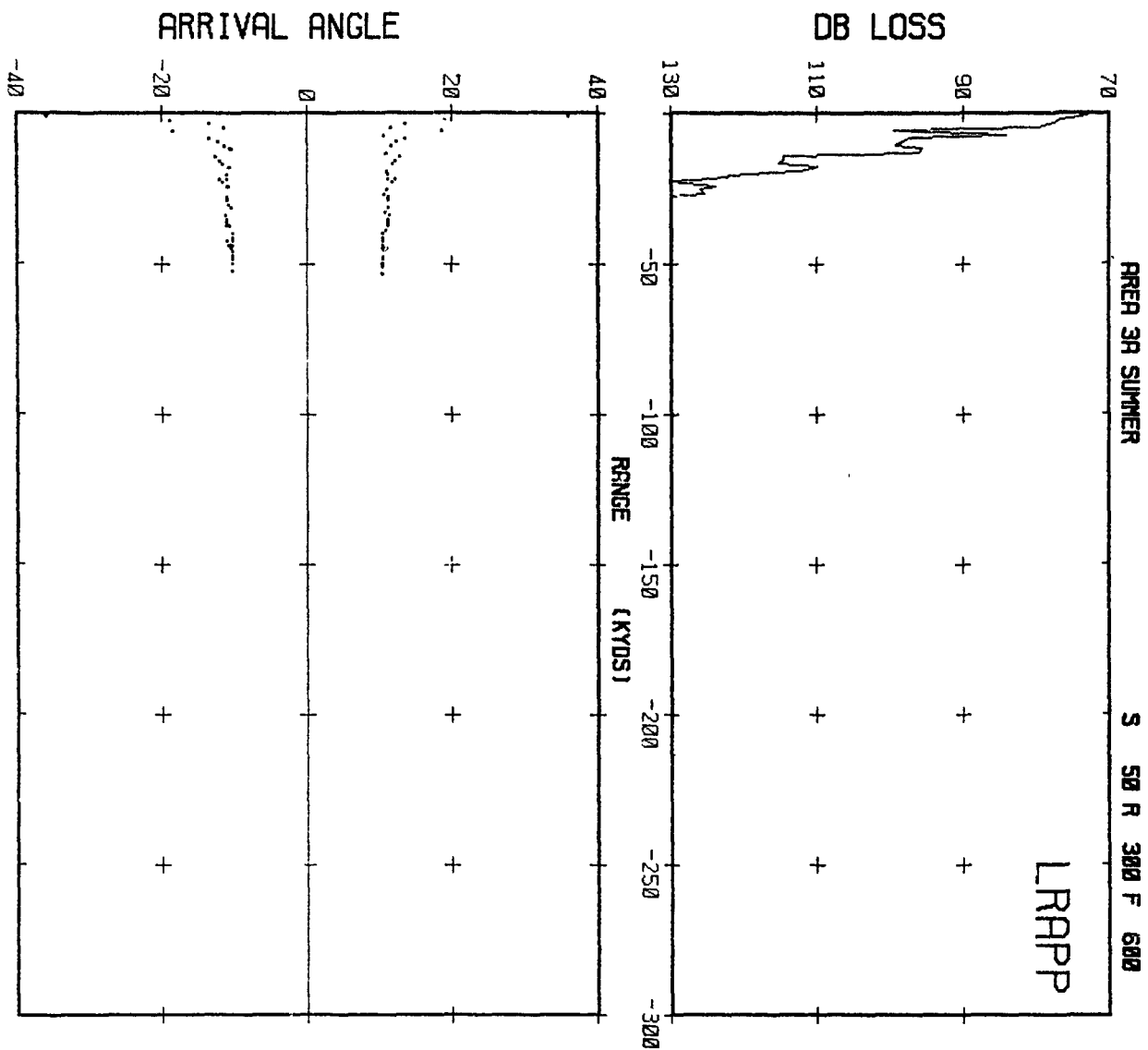


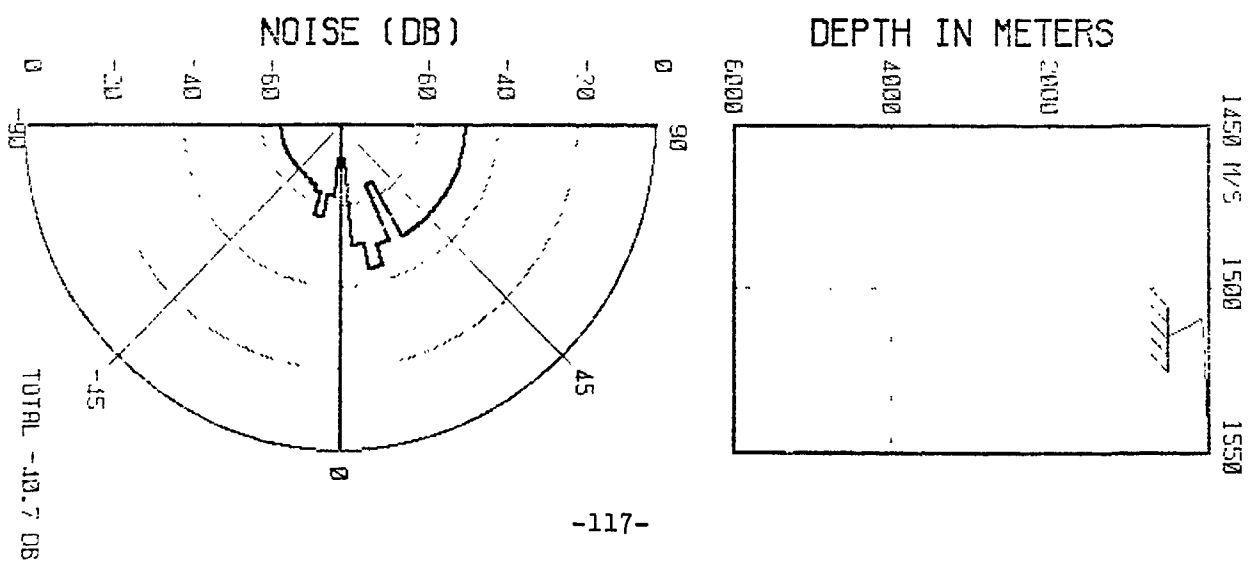
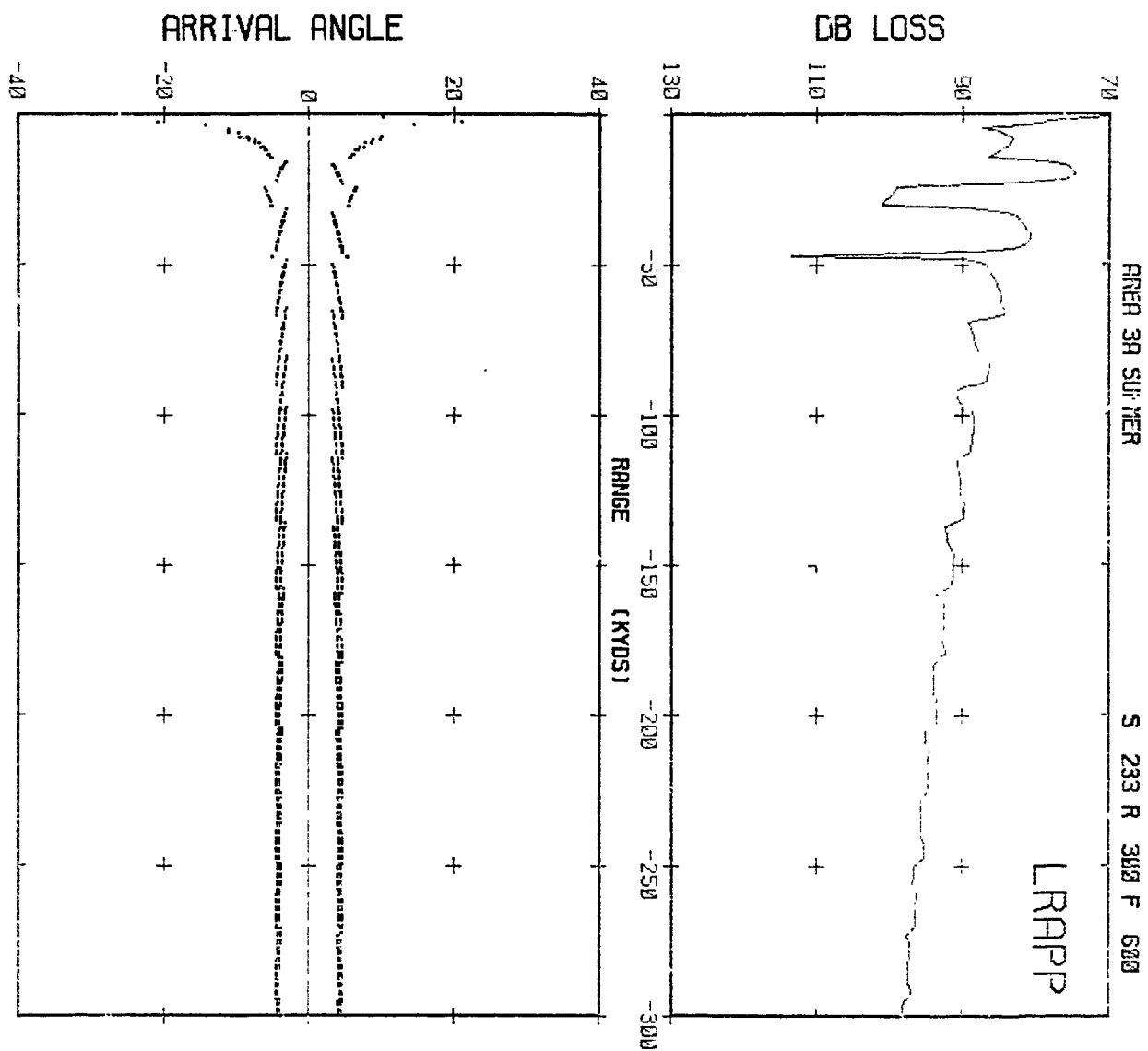


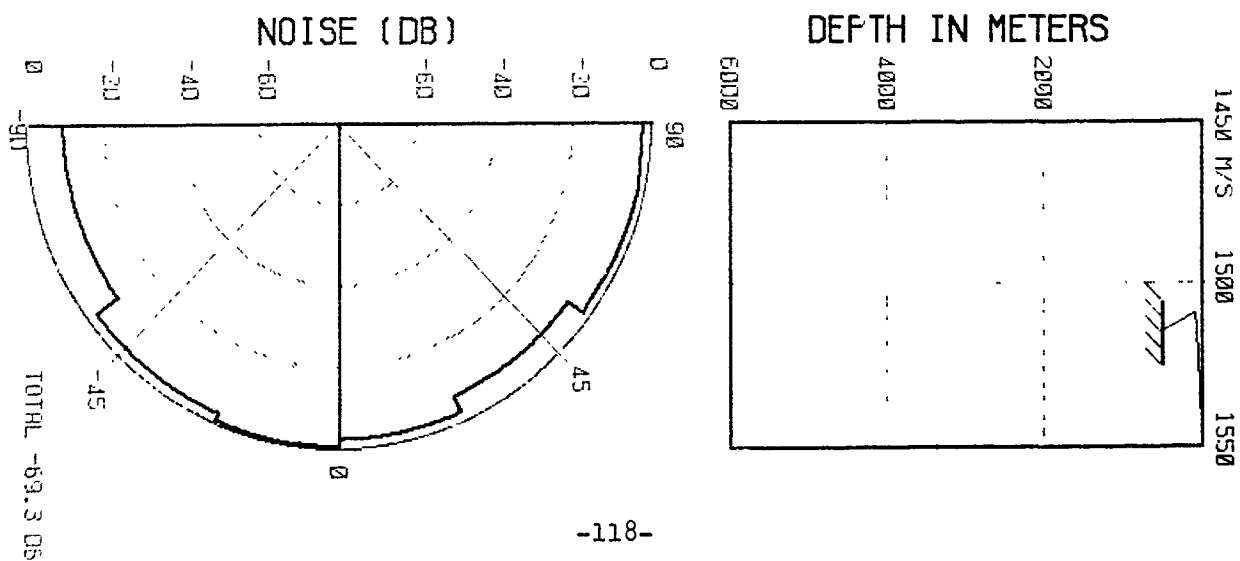
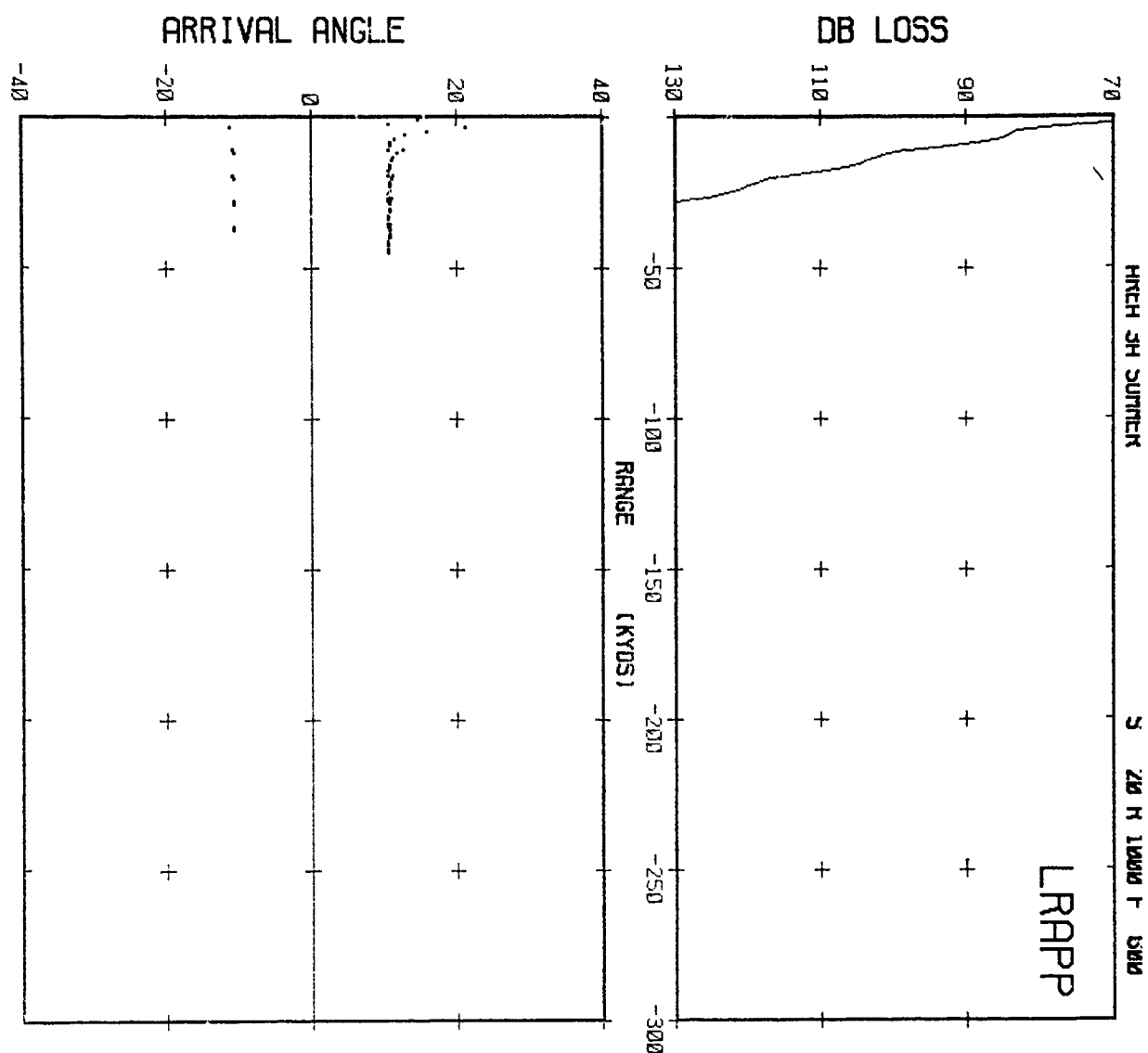










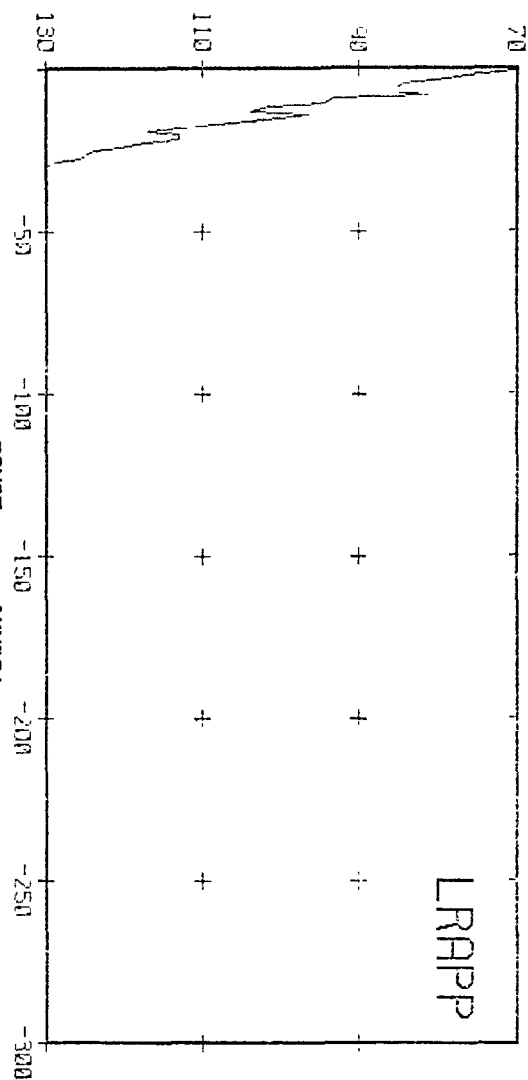


AREA 3A SUMMER

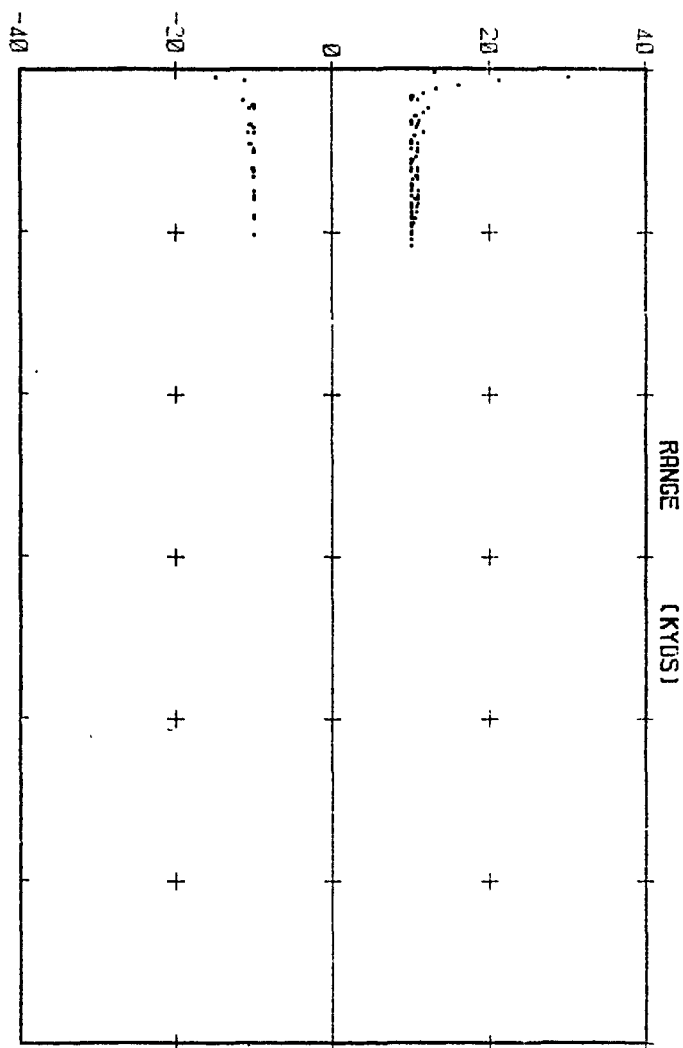
S 50 R 1000 F 000

1450 H/5 1500 1550

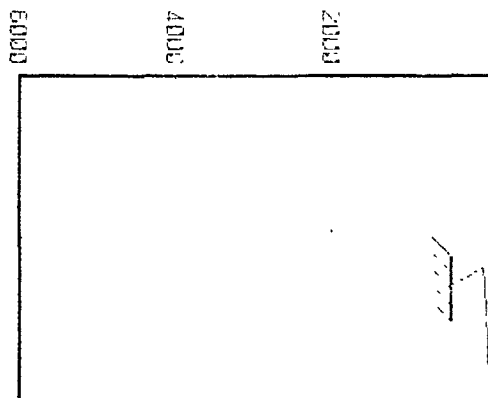
DB LOSS



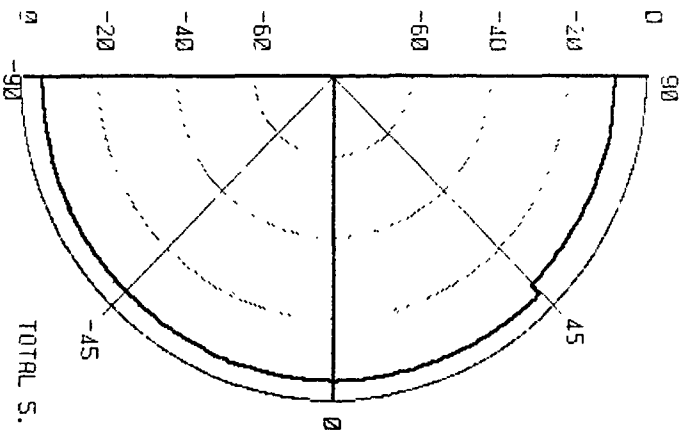
ARRIVAL ANGLE



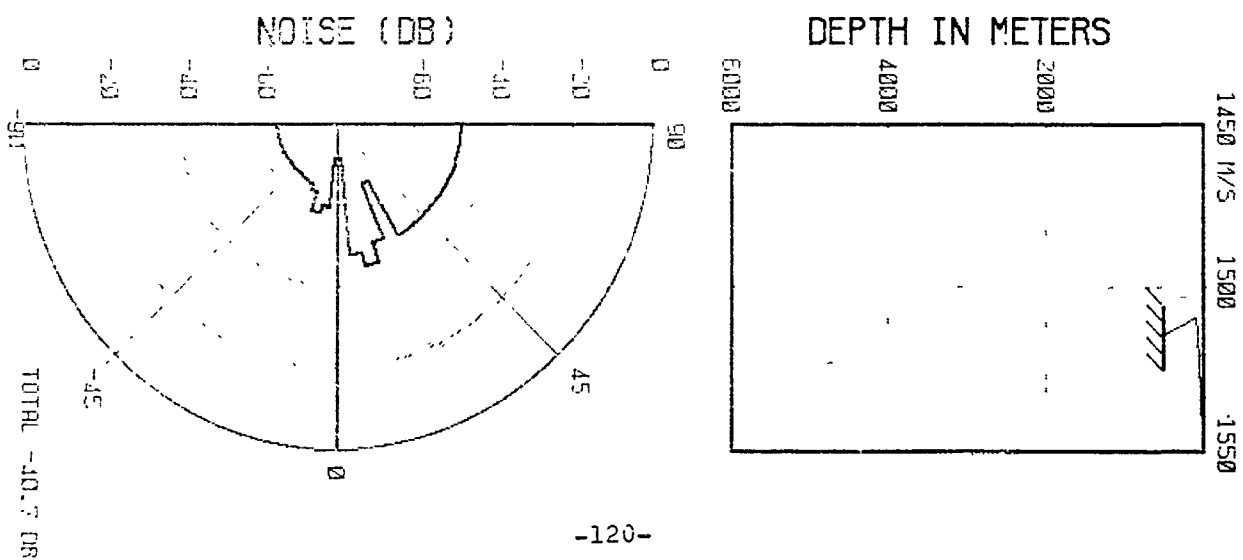
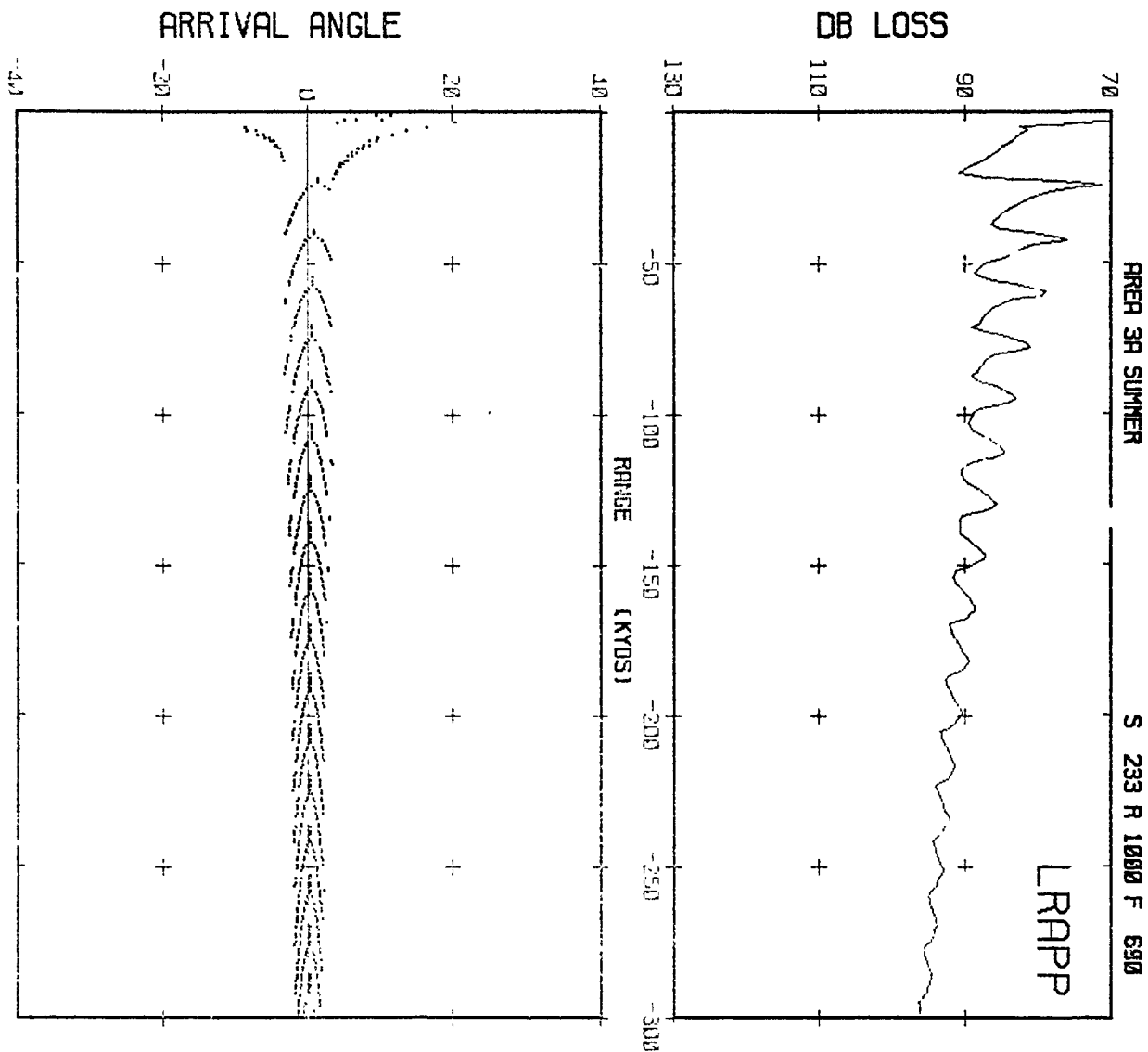
DEPTH IN METERS

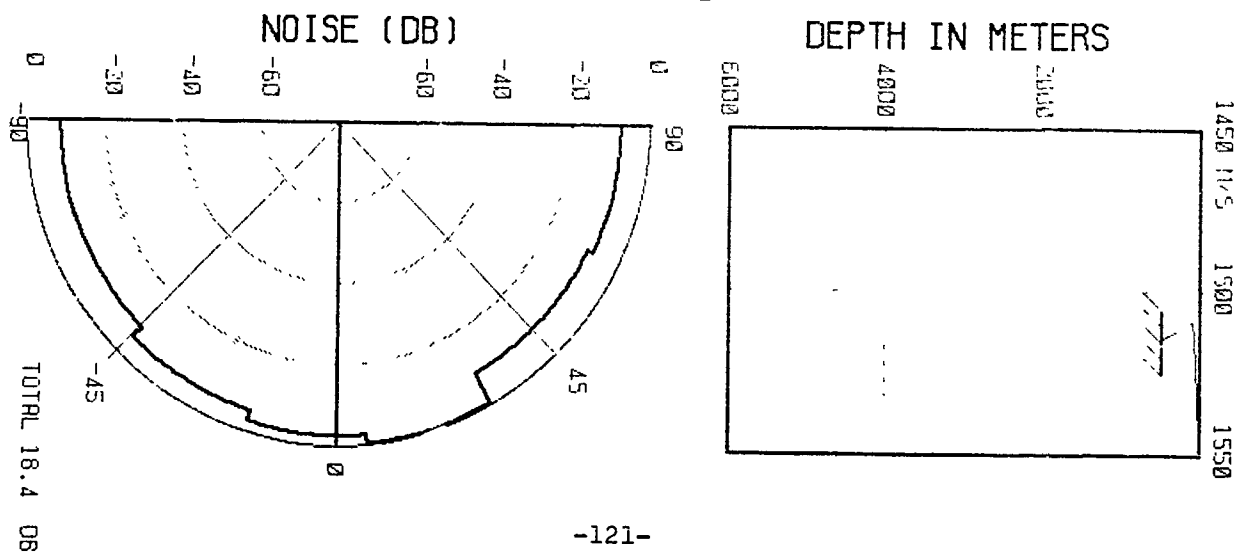
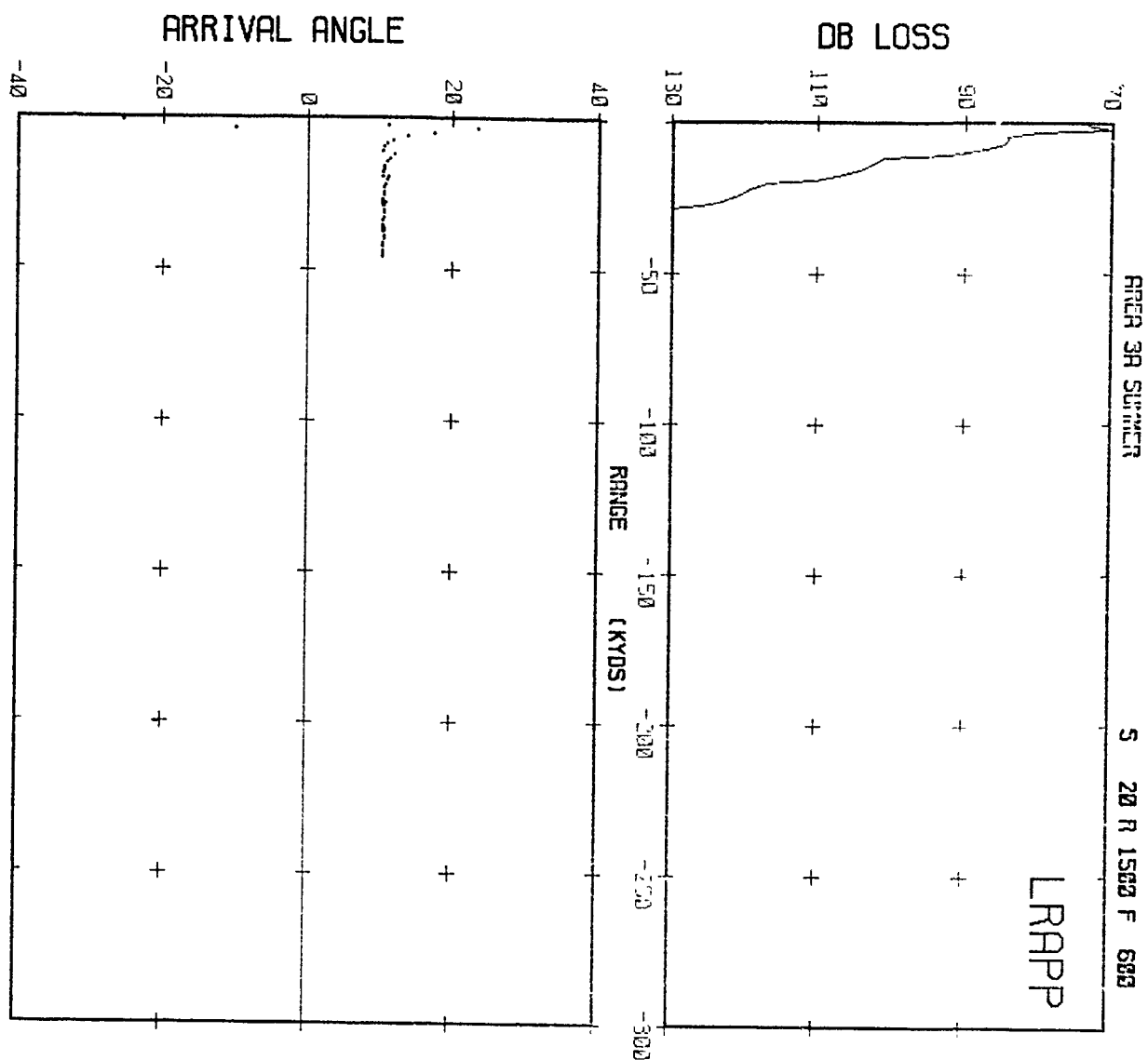


NOISE (DB)



TOTAL S.1 DB





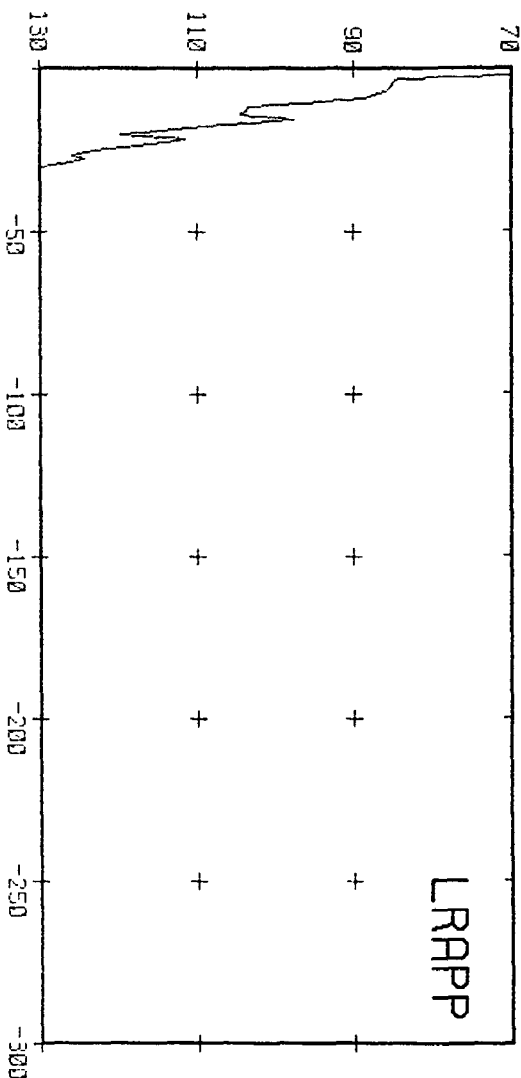
AREA 3A SUMMER

S 50 R 1500 F 600

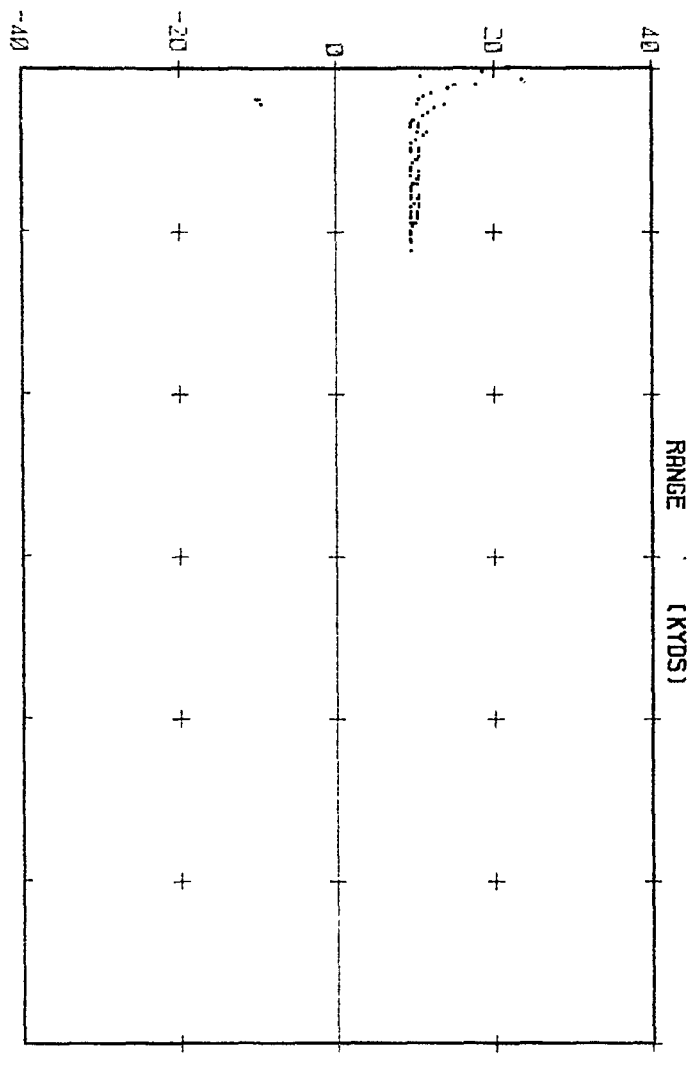
1450 M/S 1500

1550

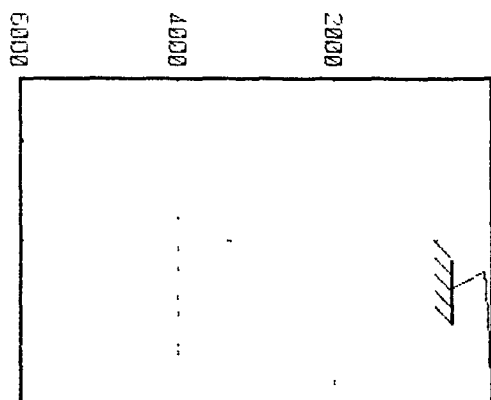
DB LOSS



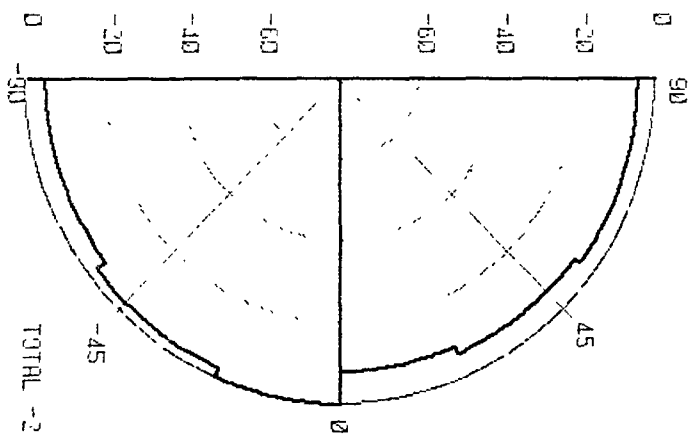
ARRIVAL ANGLE



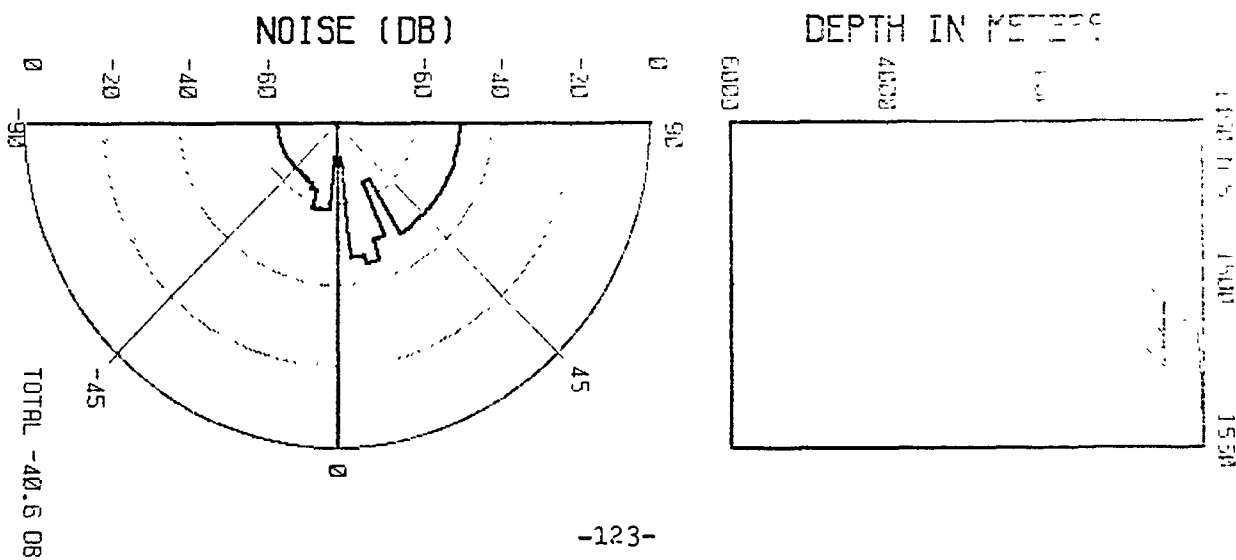
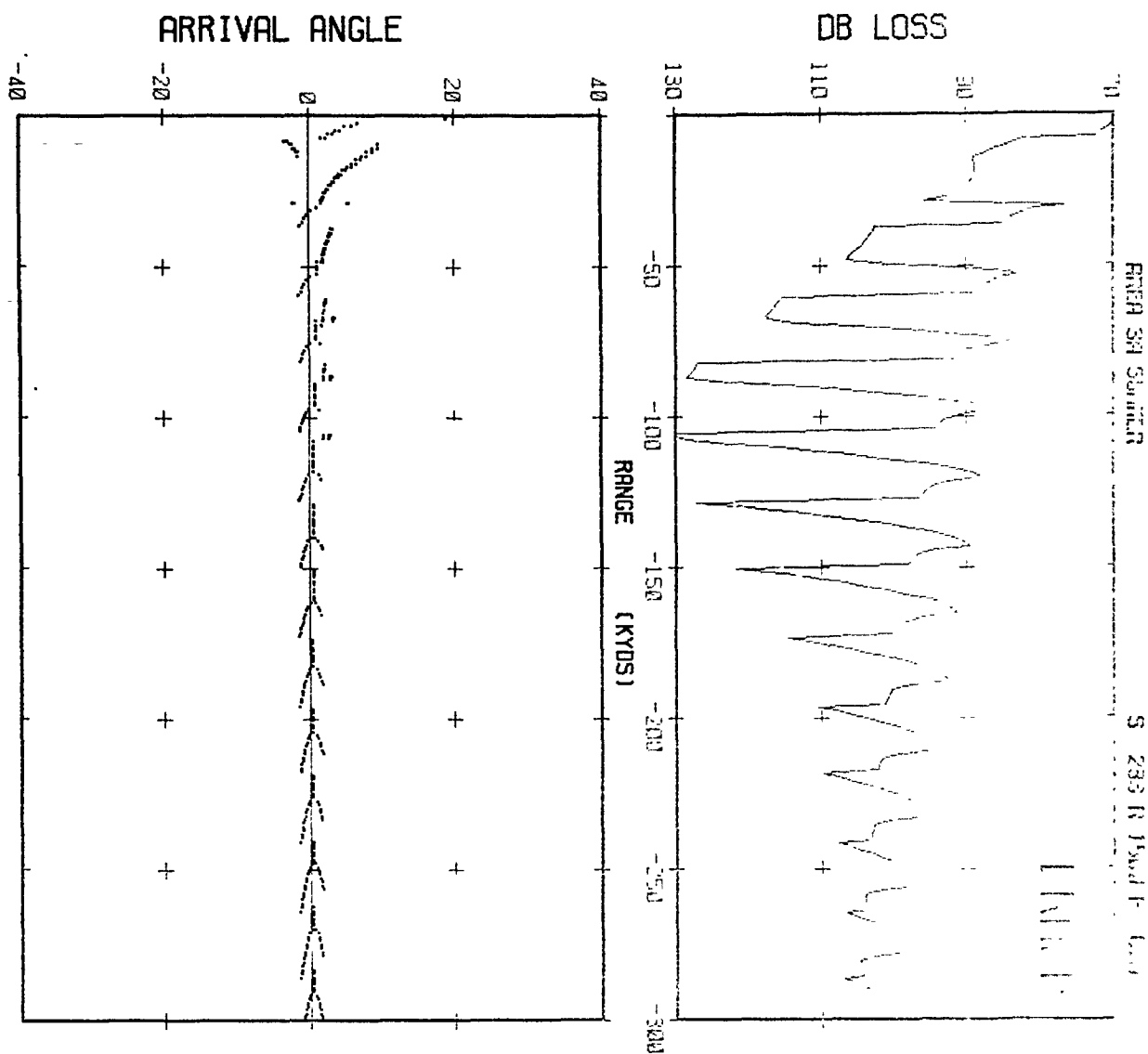
DEPTH IN METERS



NOISE (DB)



TOTAL -24.9 DB

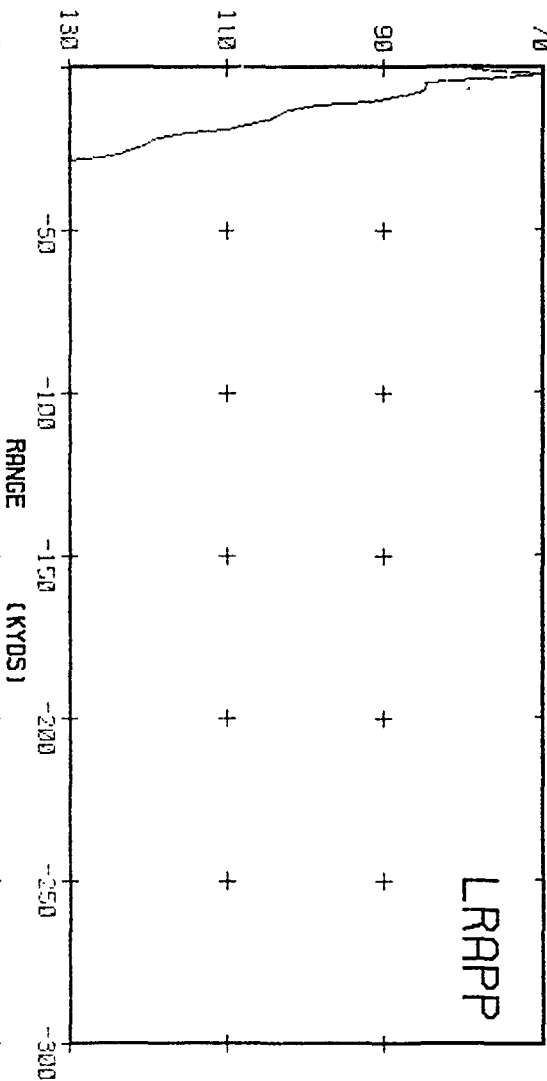


AREA 3A SUMNER

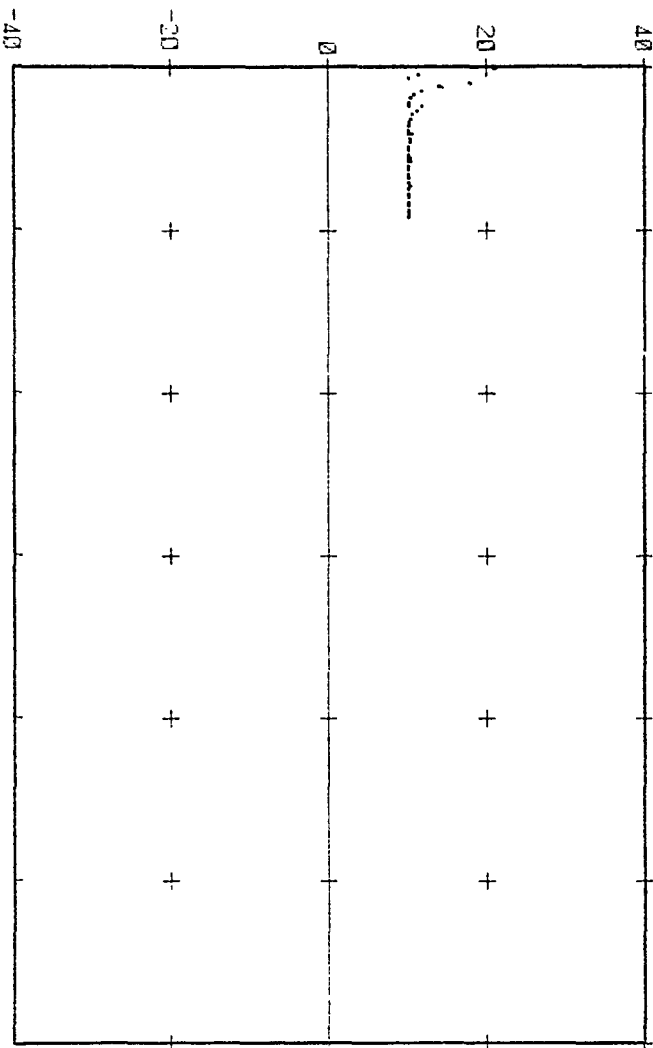
S 20 R 1640 F 600

1450 M/S 1500 1550

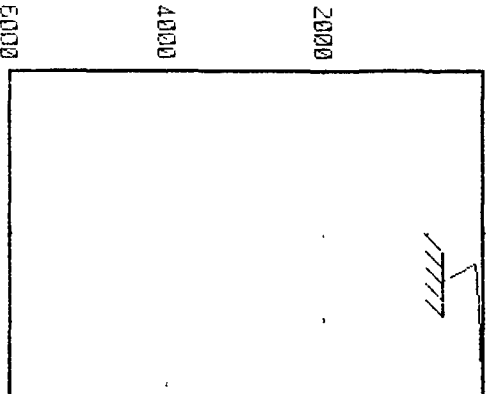
DB LOSS



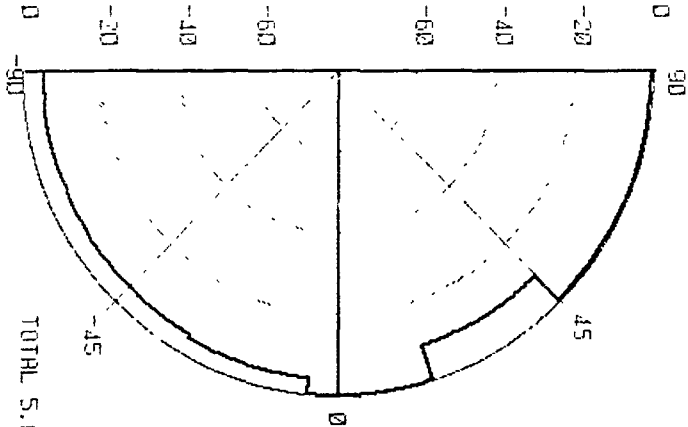
ARRIVAL ANGLE

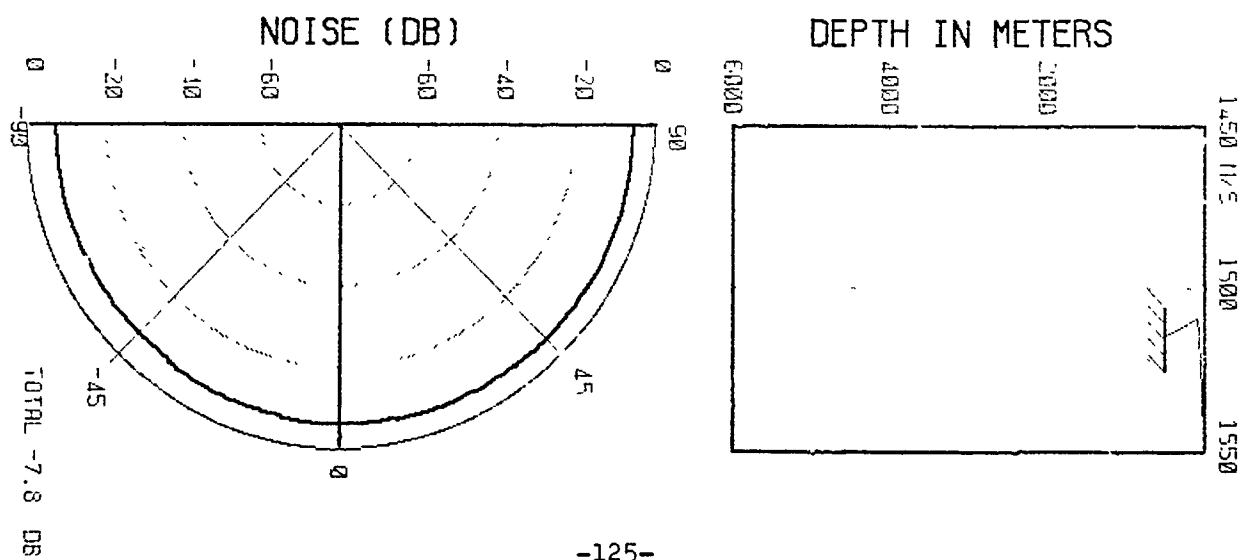
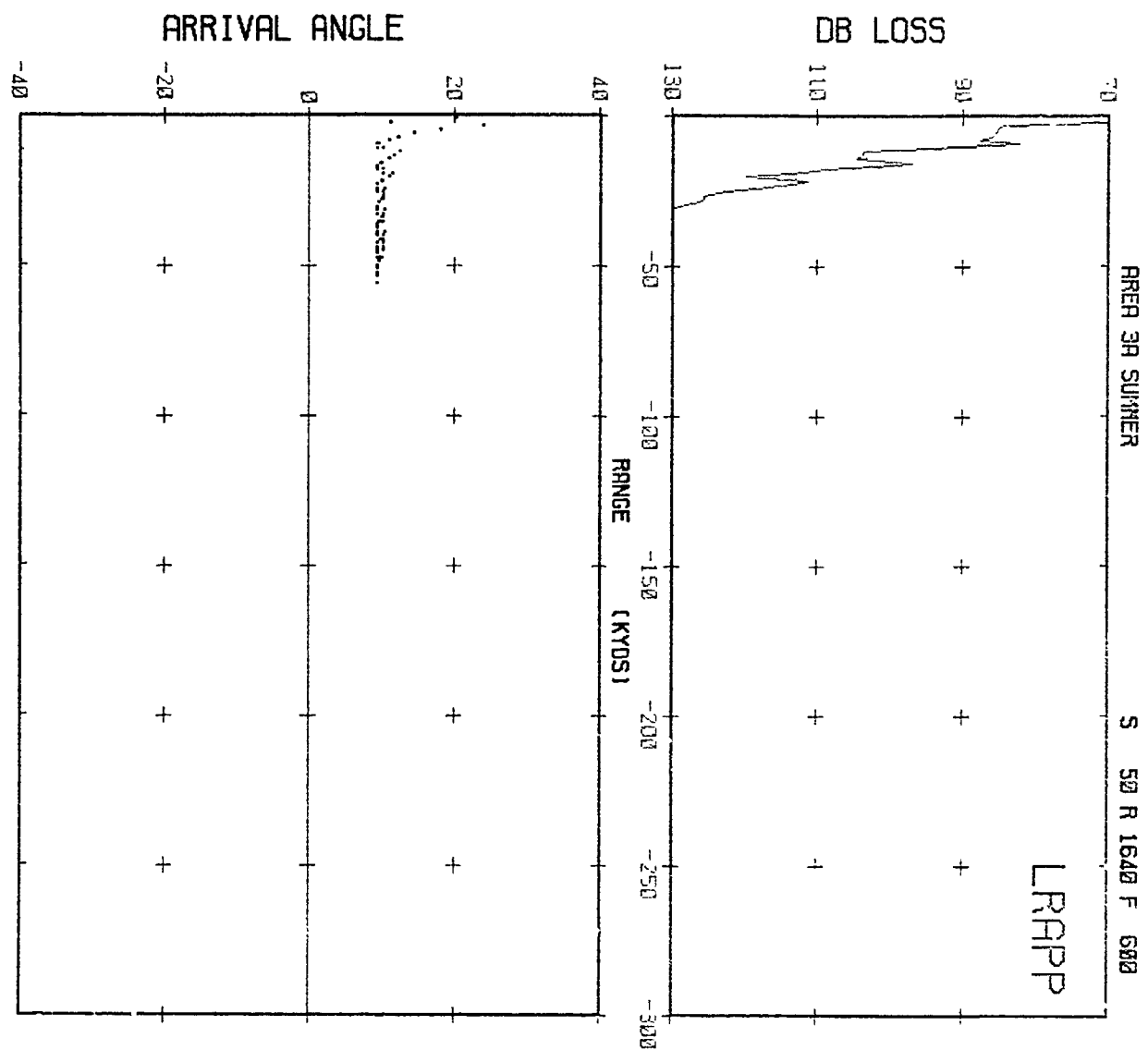


DEPTH IN METERS



NOISE (DB)



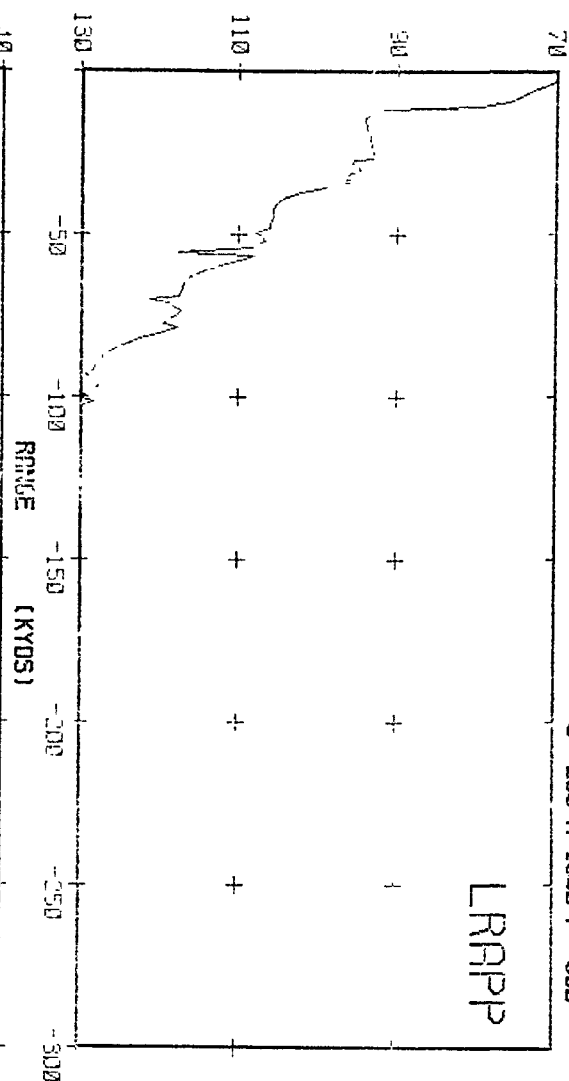


ARRER 3A SUMMER

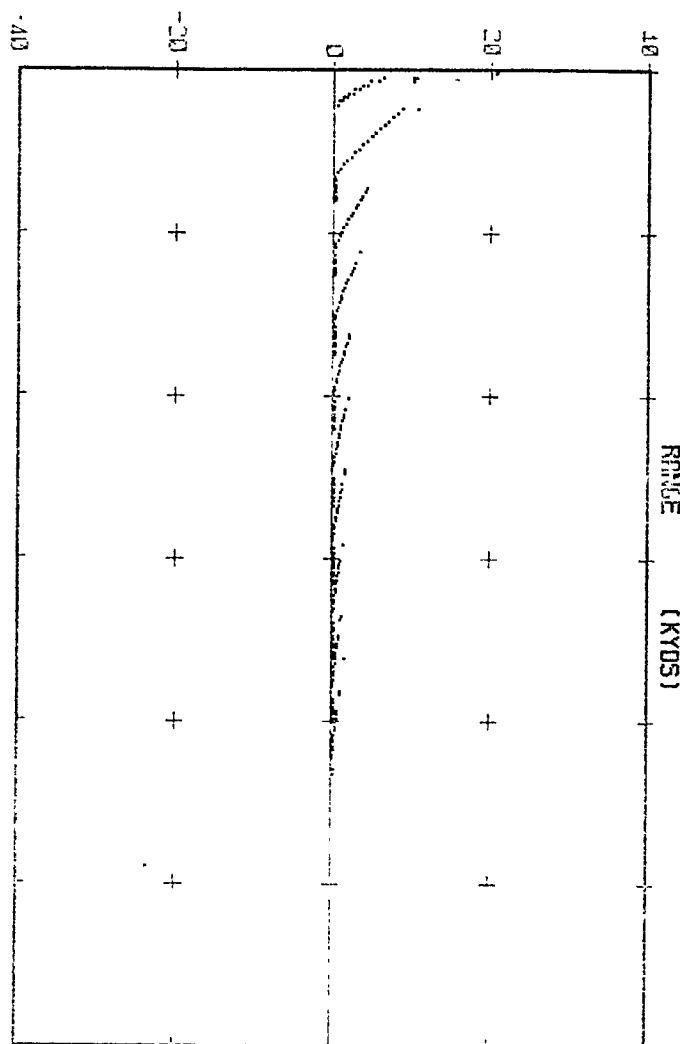
S 233 R 1640 F 630

1450 11/5 1500 -1550

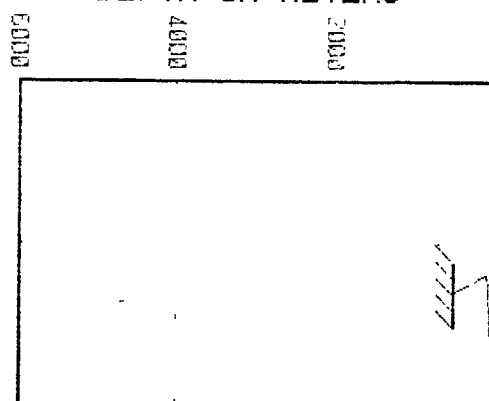
DB LOSS



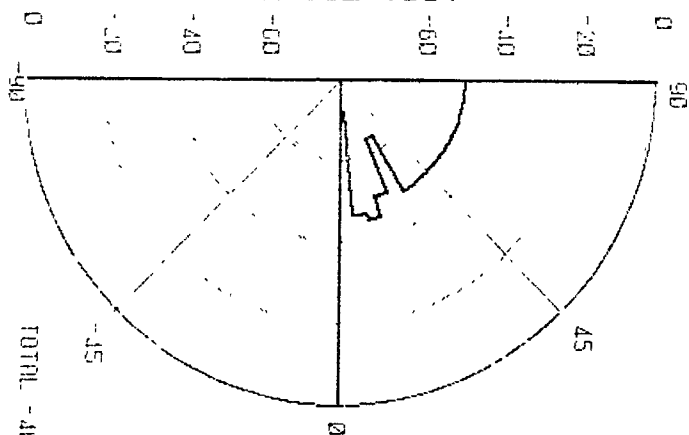
ARRIVAL ANGLE



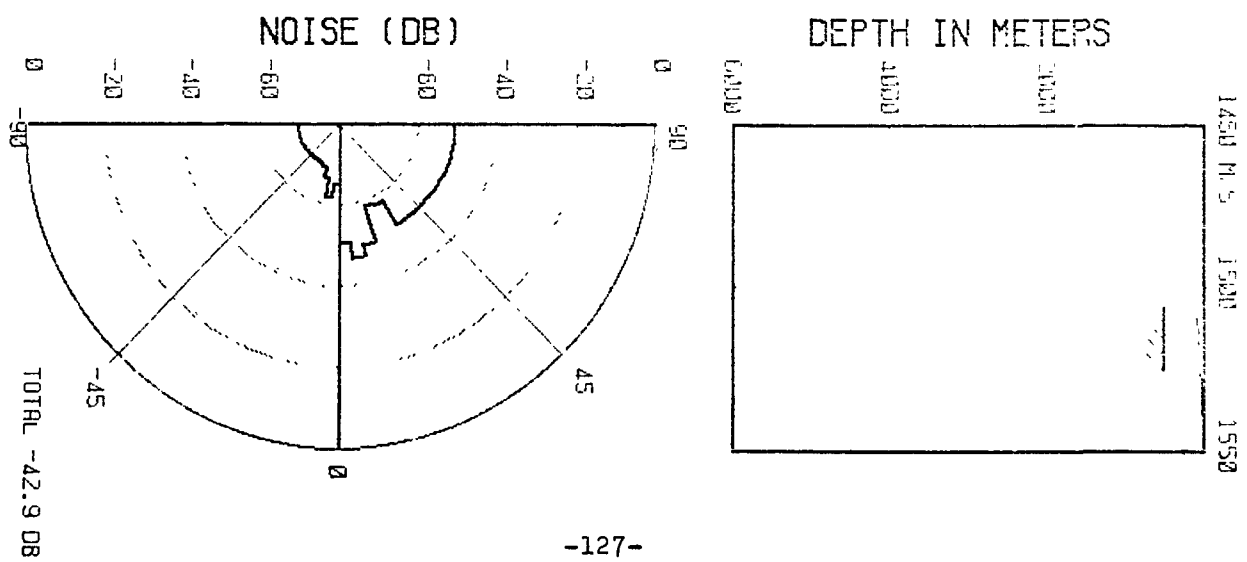
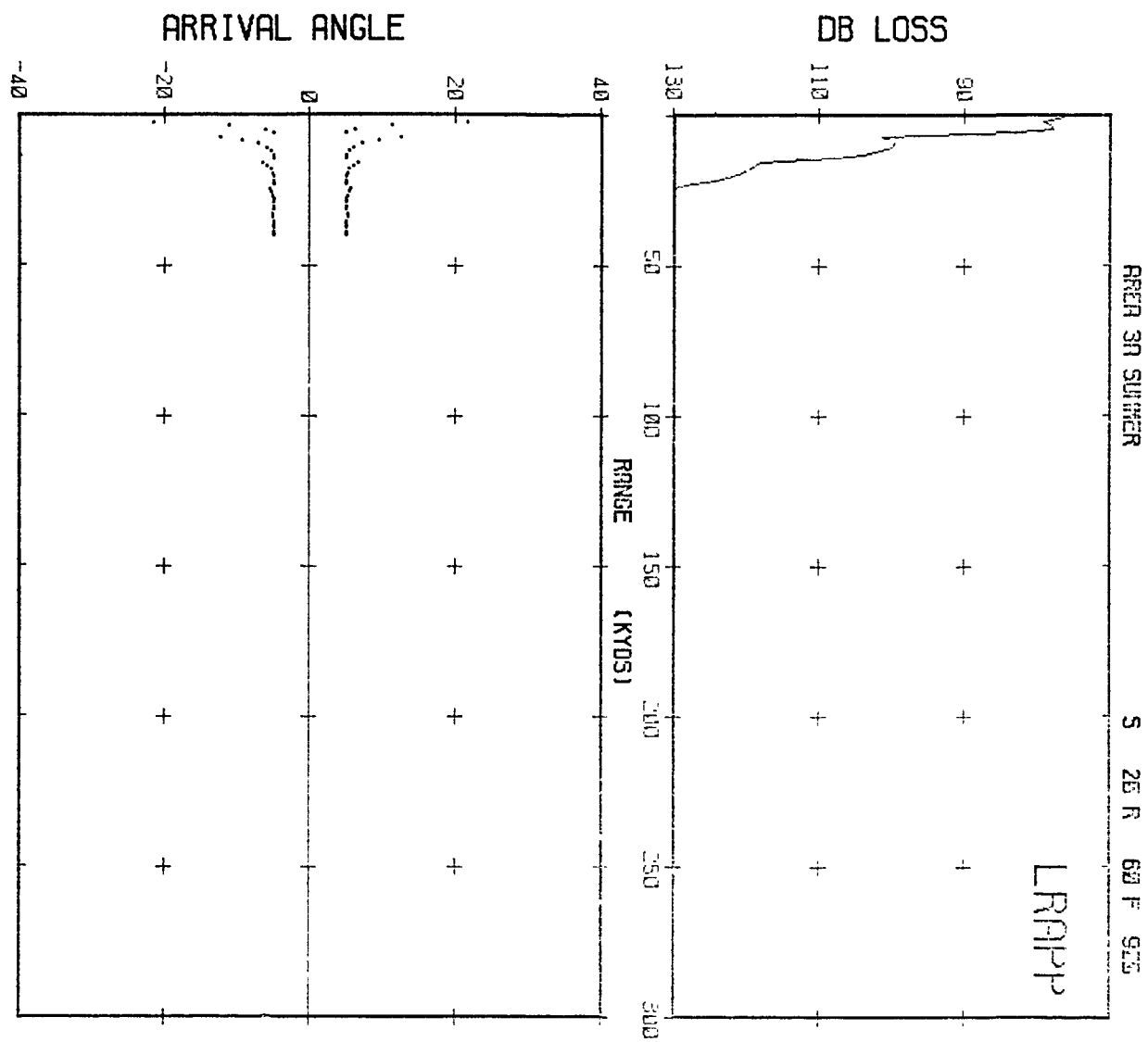
DEPTH IN METERS

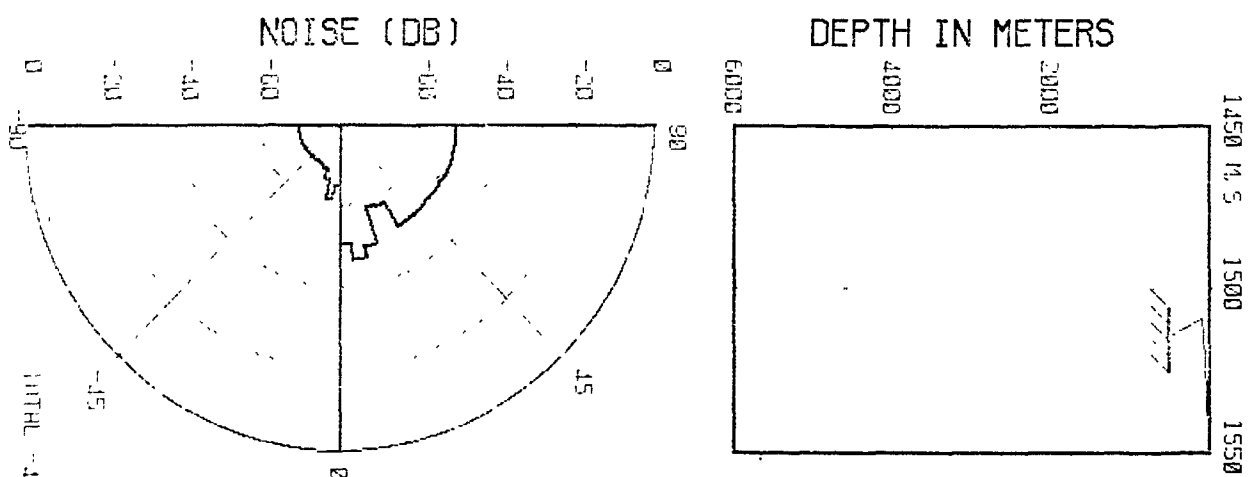
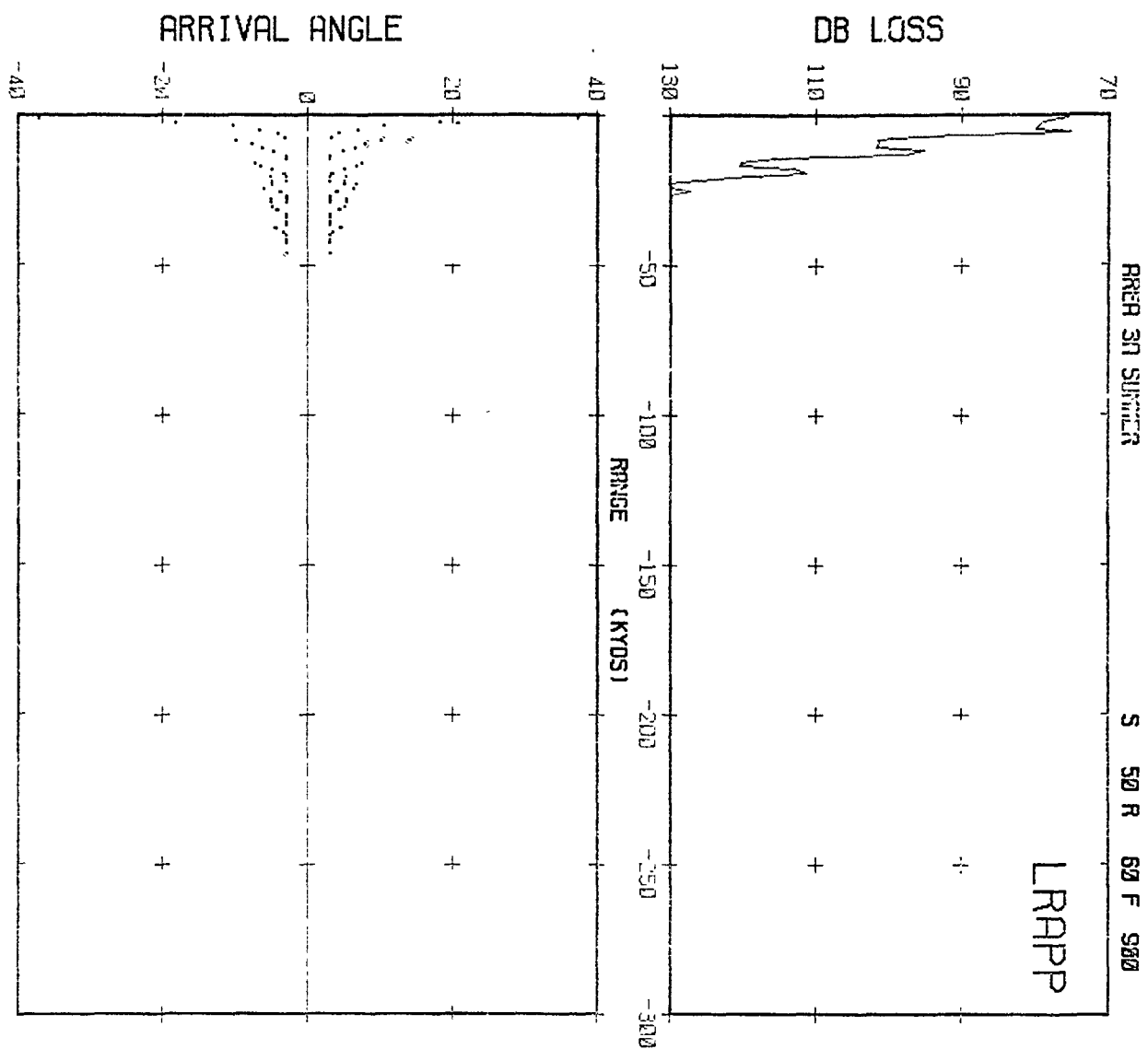


NOISE (DB)



TOTAL -40.8 DB



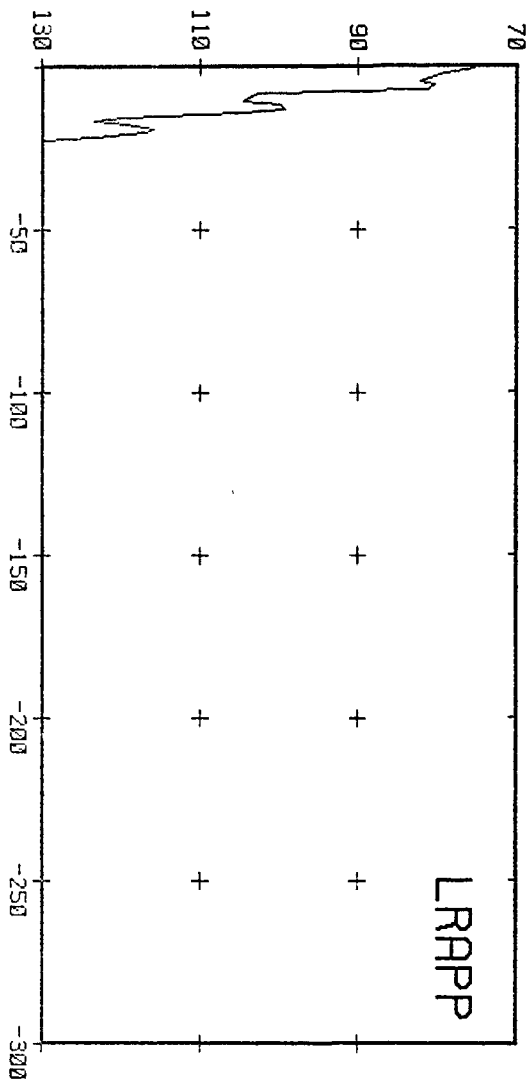


AREA 3A SUMMER

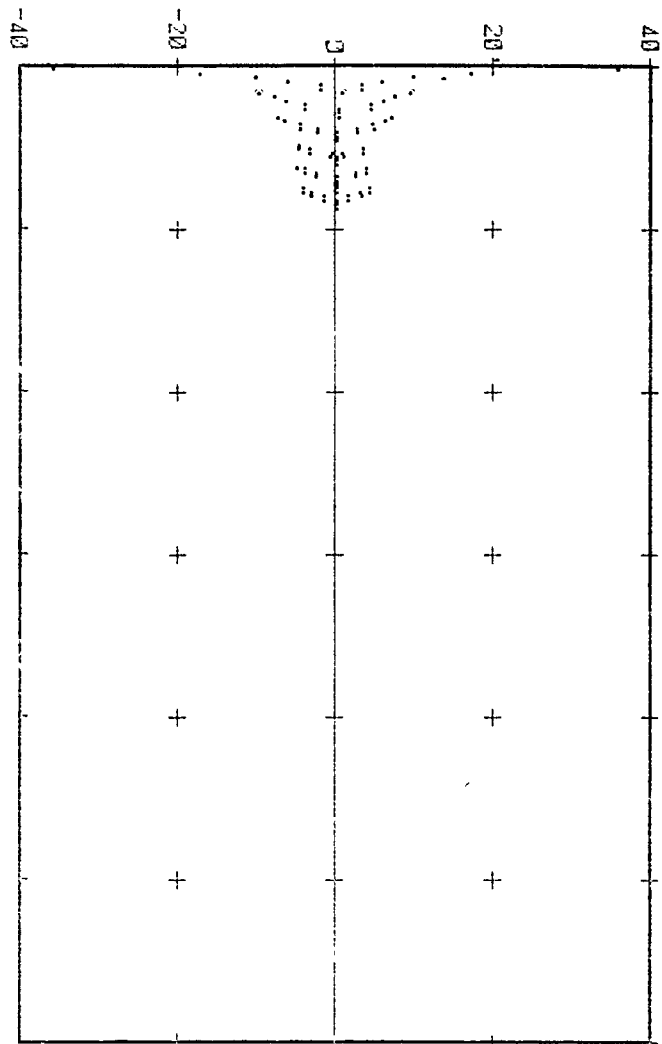
S 233 R 60 F 900

1450 M/S 1500 1550

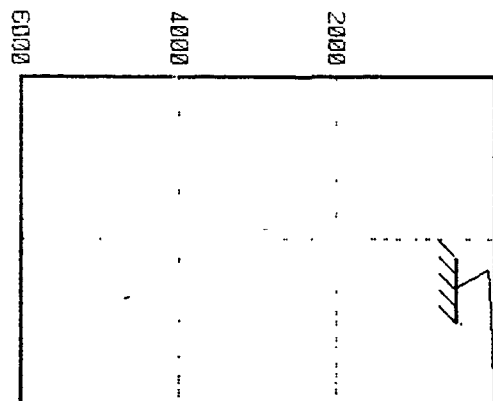
DB LOSS



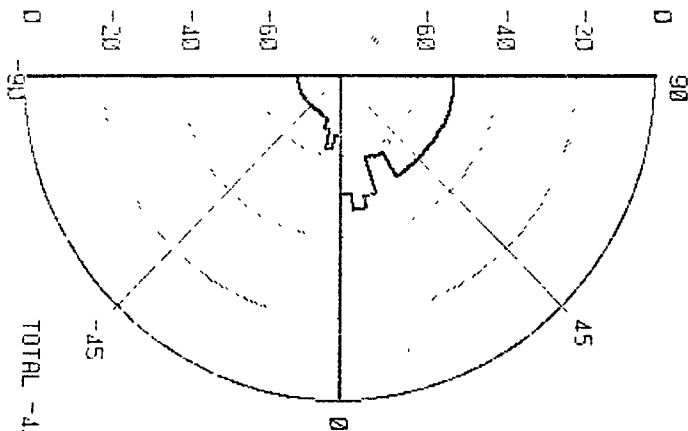
ARRIVAL ANGLE



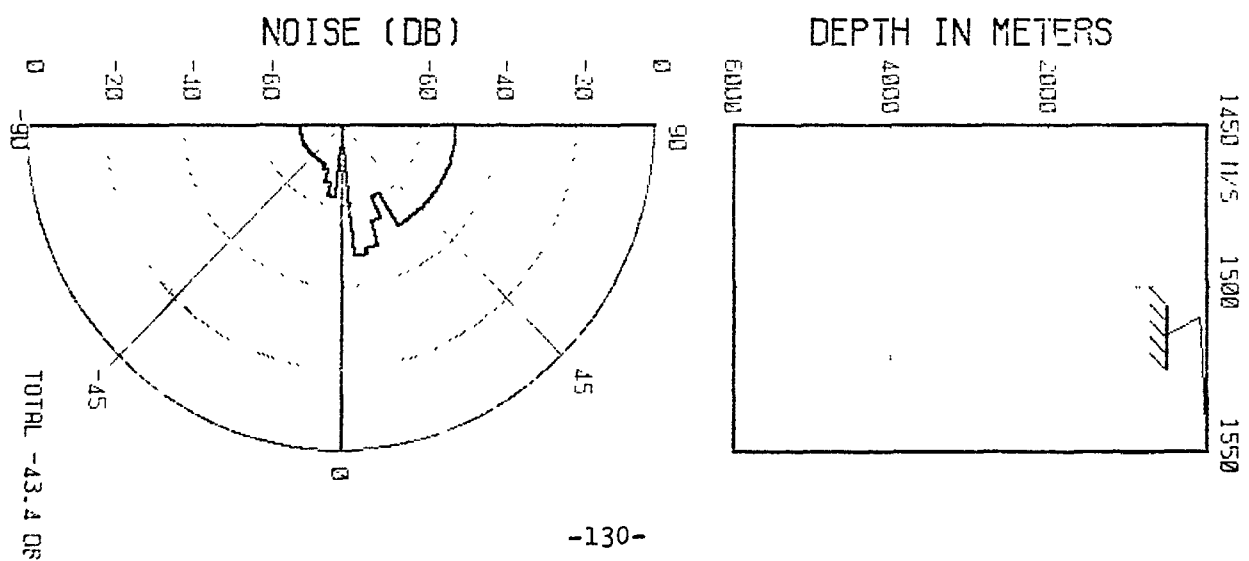
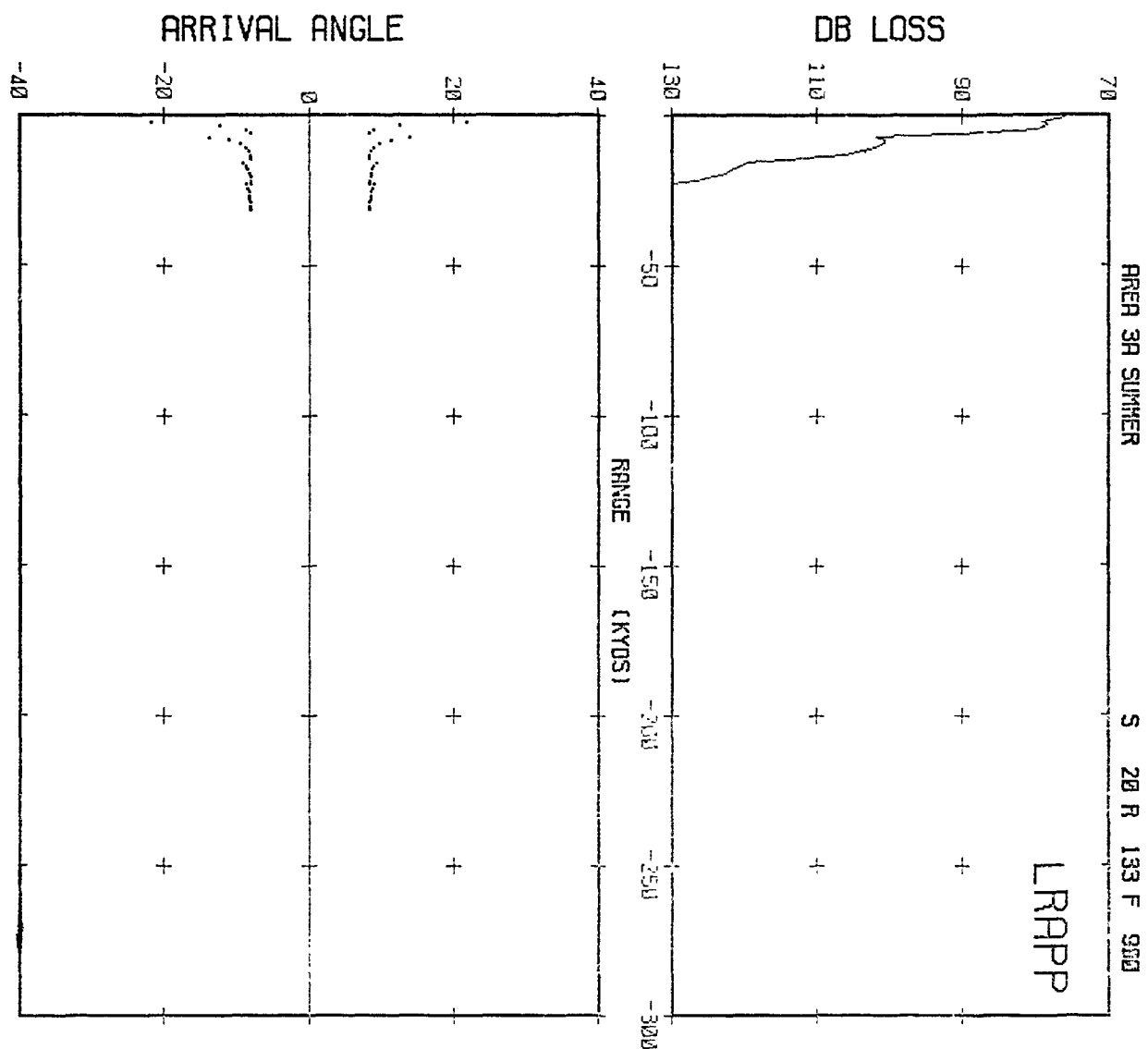
DEPTH IN METERS



NOISE (DB)



TOTAL -42.9 DB

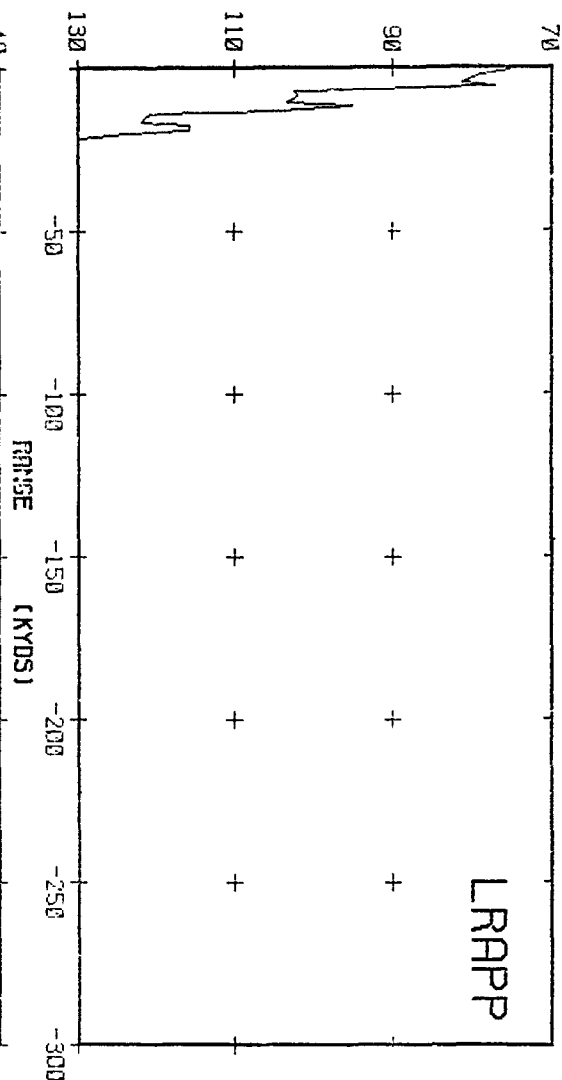


AREA 3R SUMMER

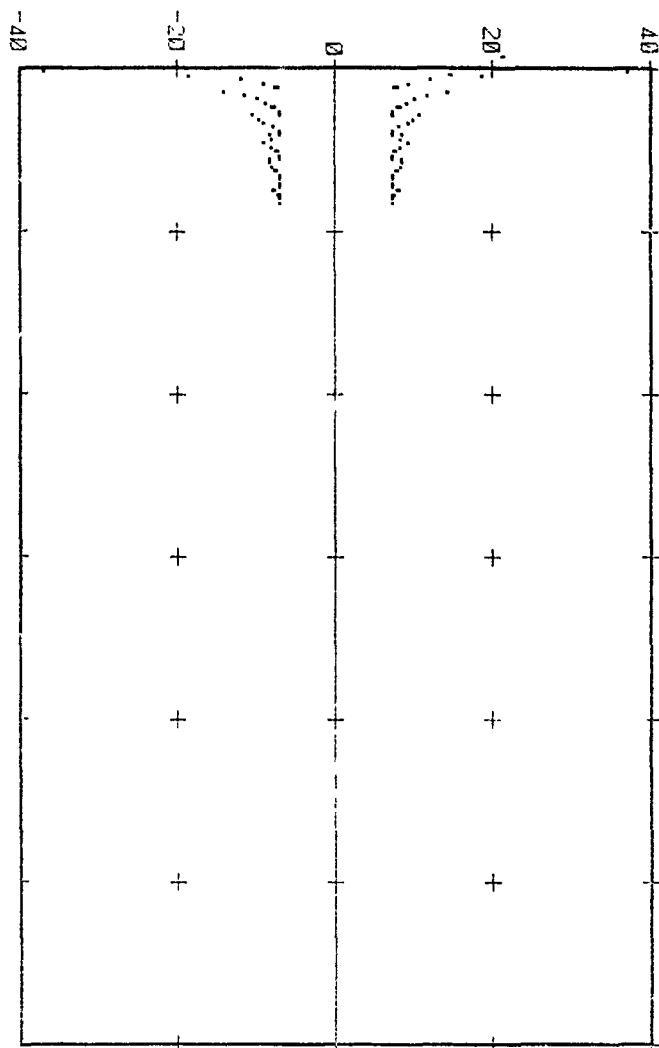
S 50 R 133 F 900

1450 M/S 1500 1550

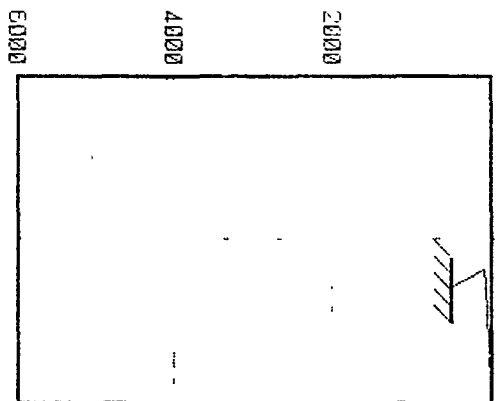
DB LOSS



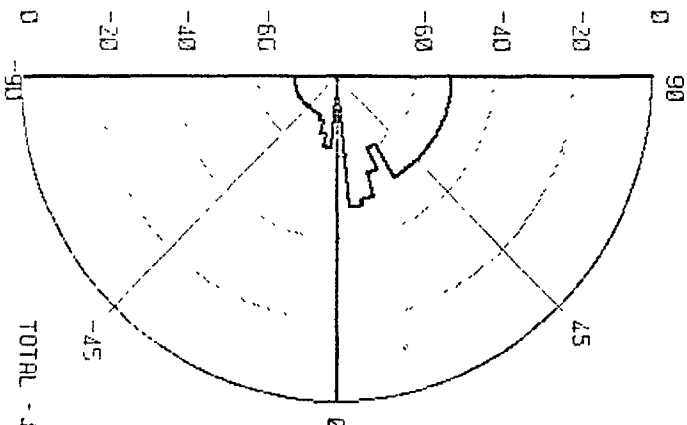
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

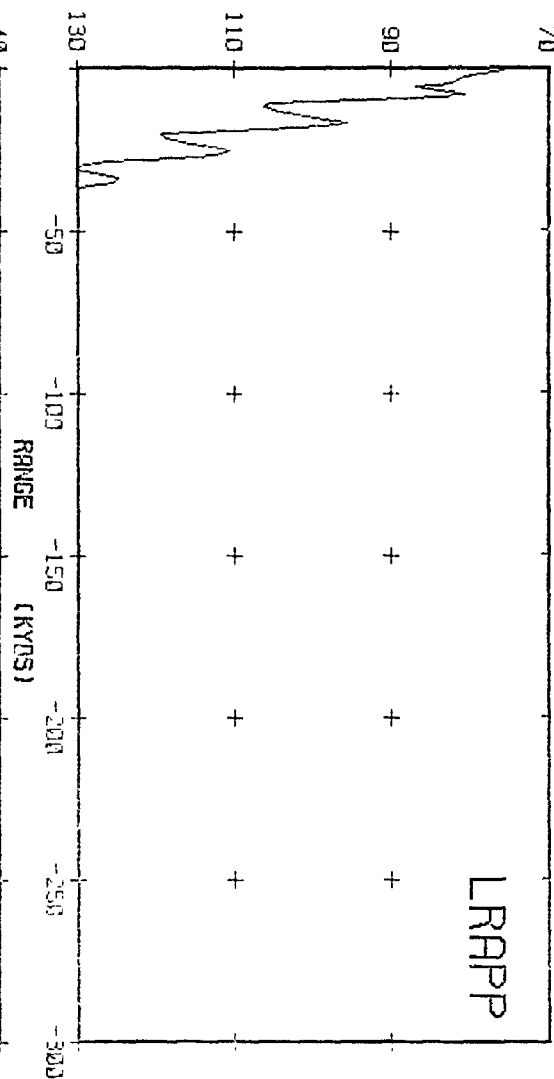


AREA 3A SUMMER

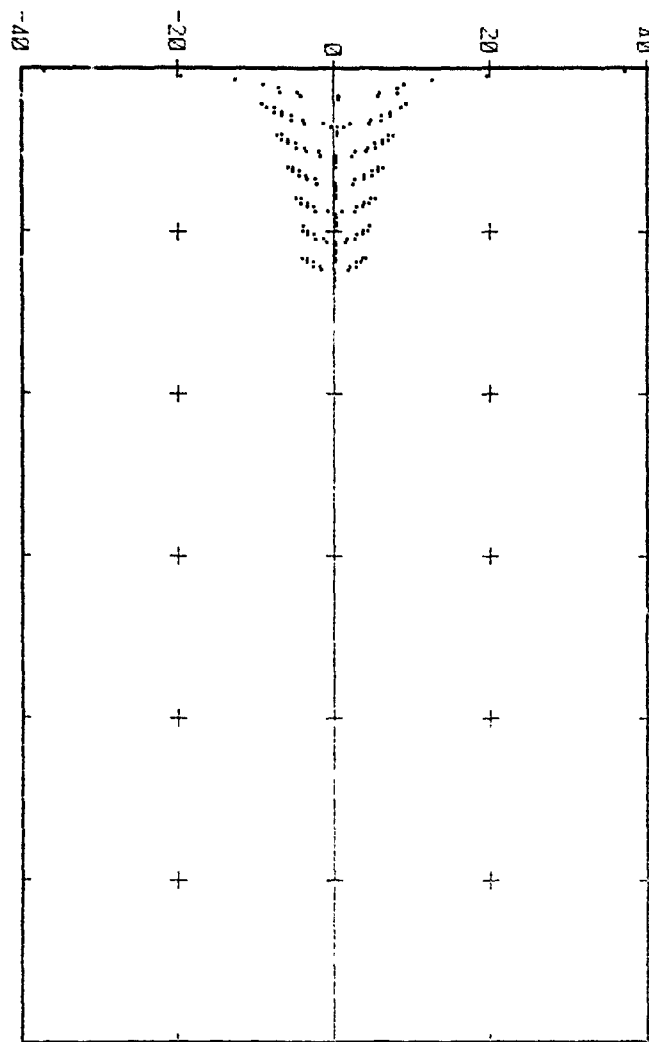
S 233 R 133 F 980

1450 11/5 1500 1550

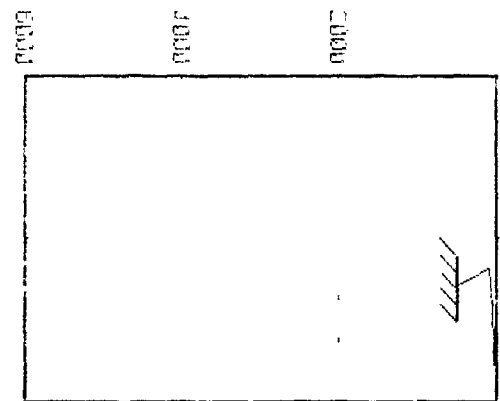
DB LOSS



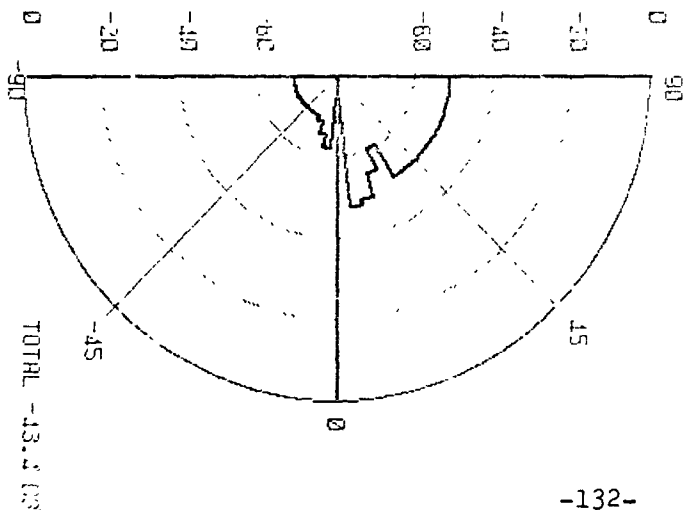
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

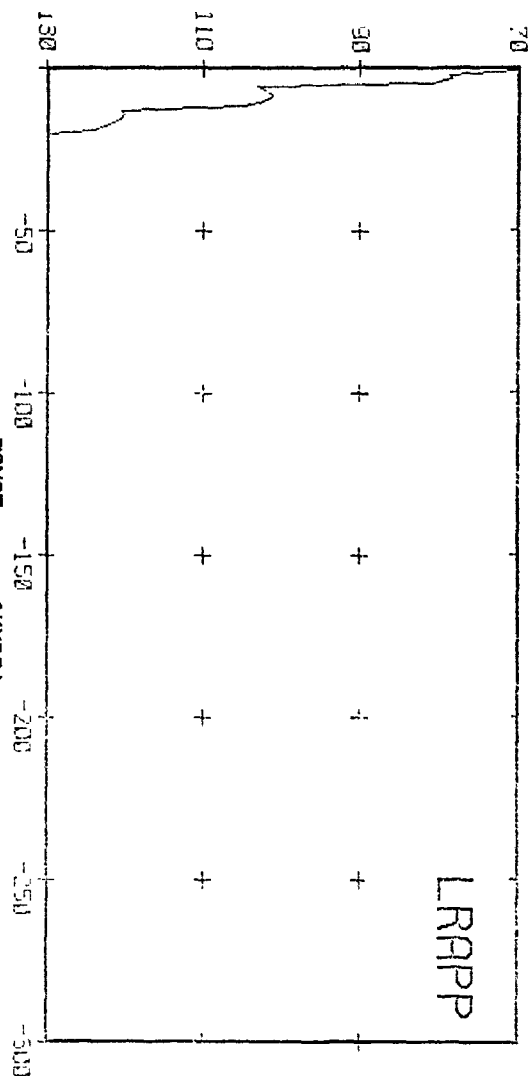


AREA 30 SUMMER

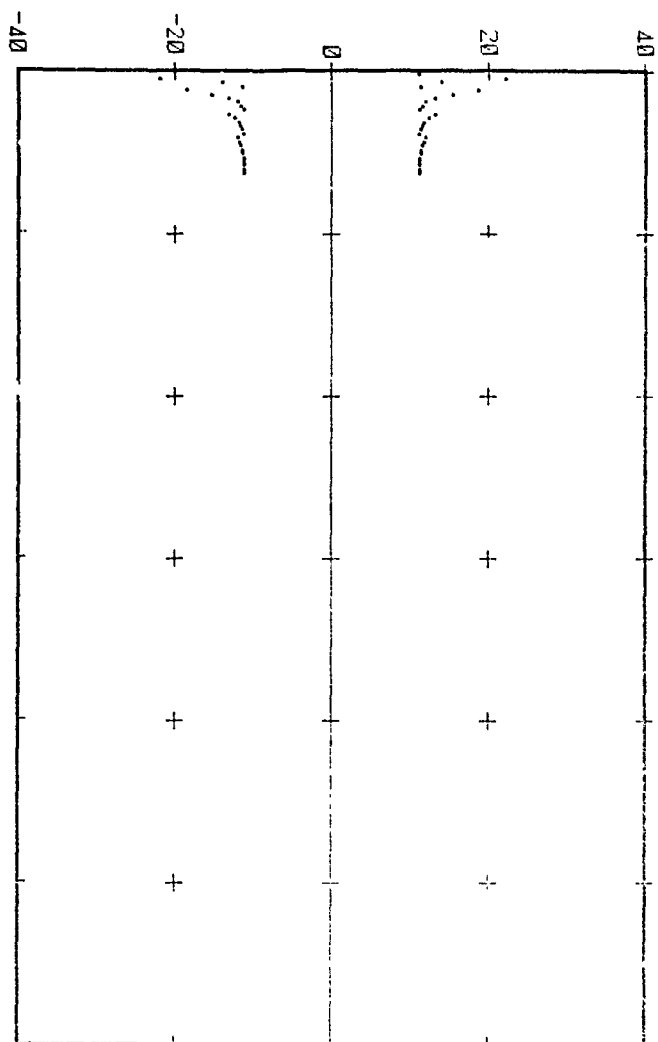
S - 20 R 262 F 950

1450 H'S 1500 1550

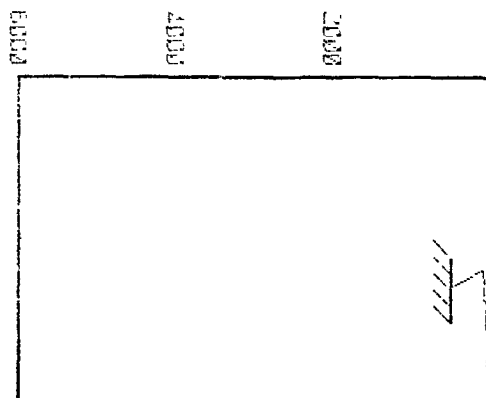
DB LOSS



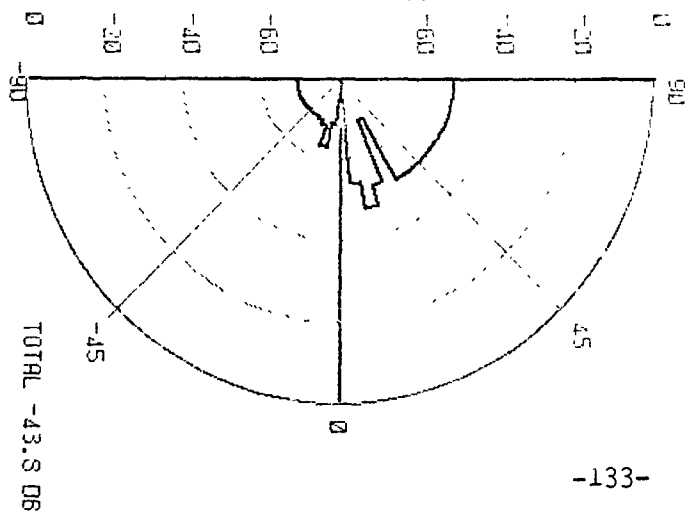
ARRIVAL ANGLE

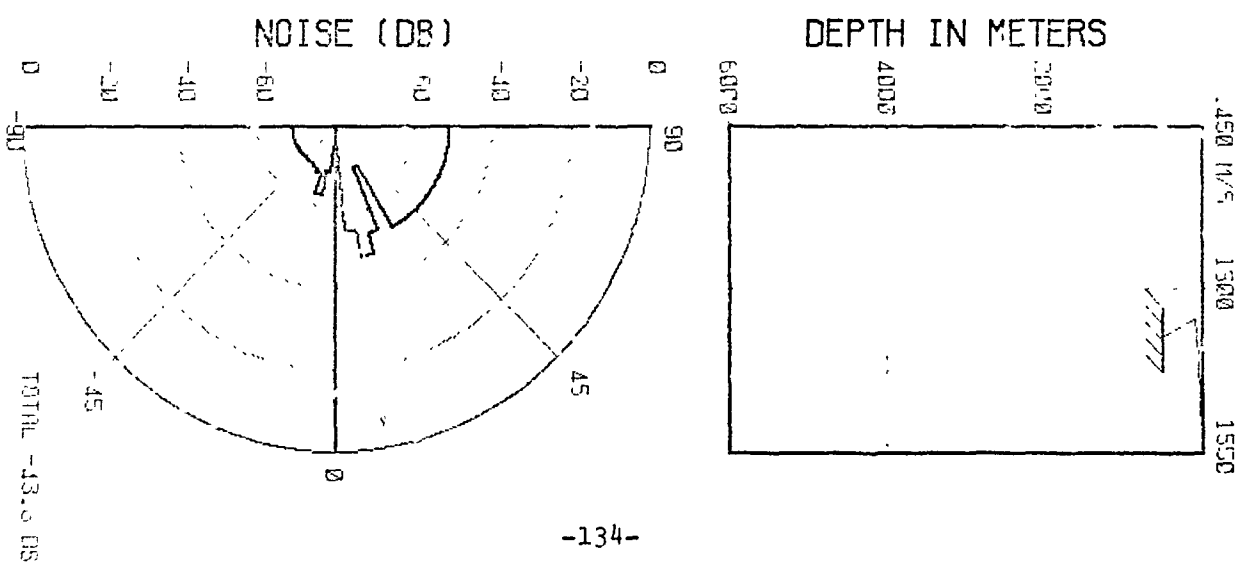
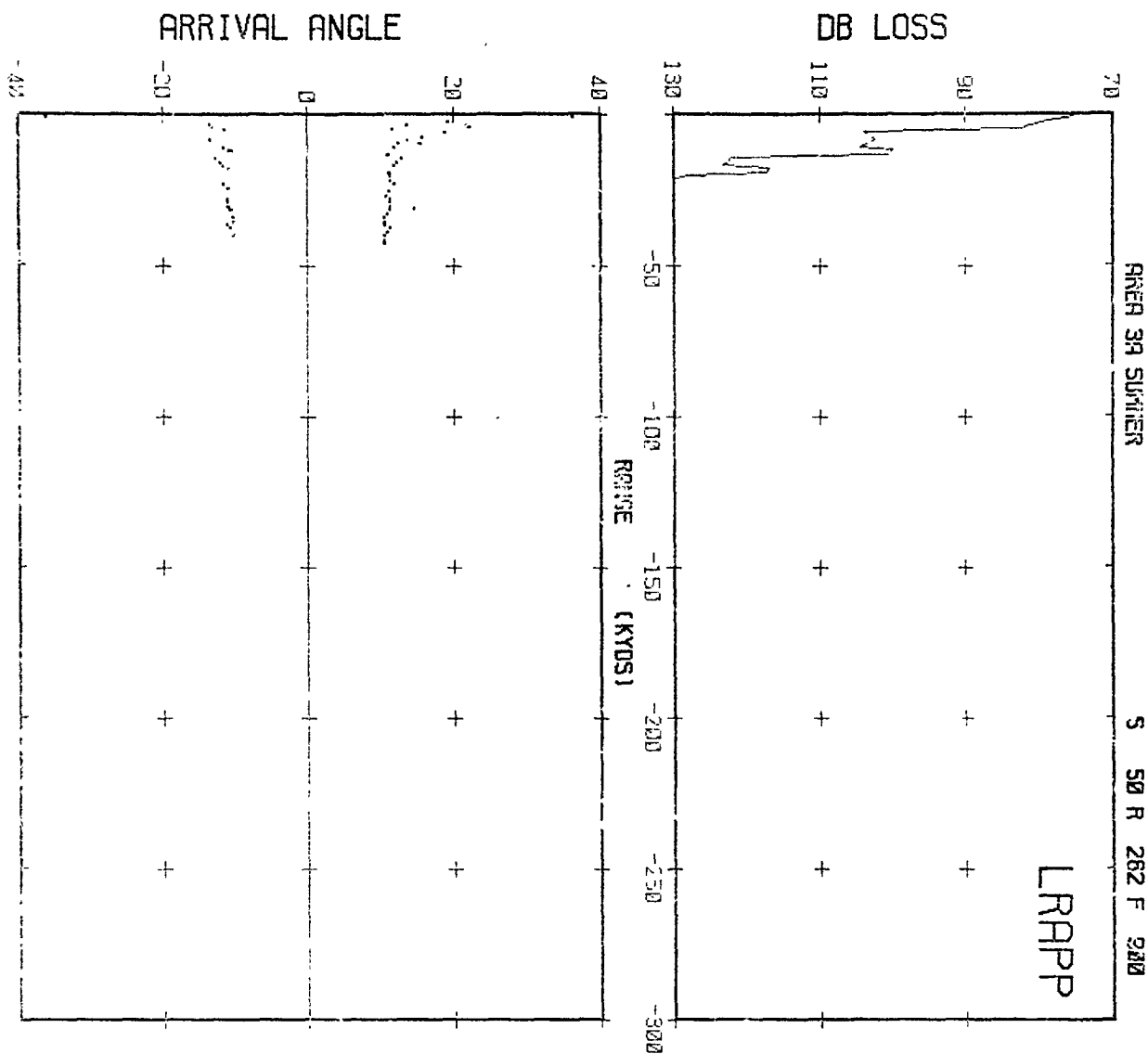


DEPTH IN METERS



NOISE (DB)



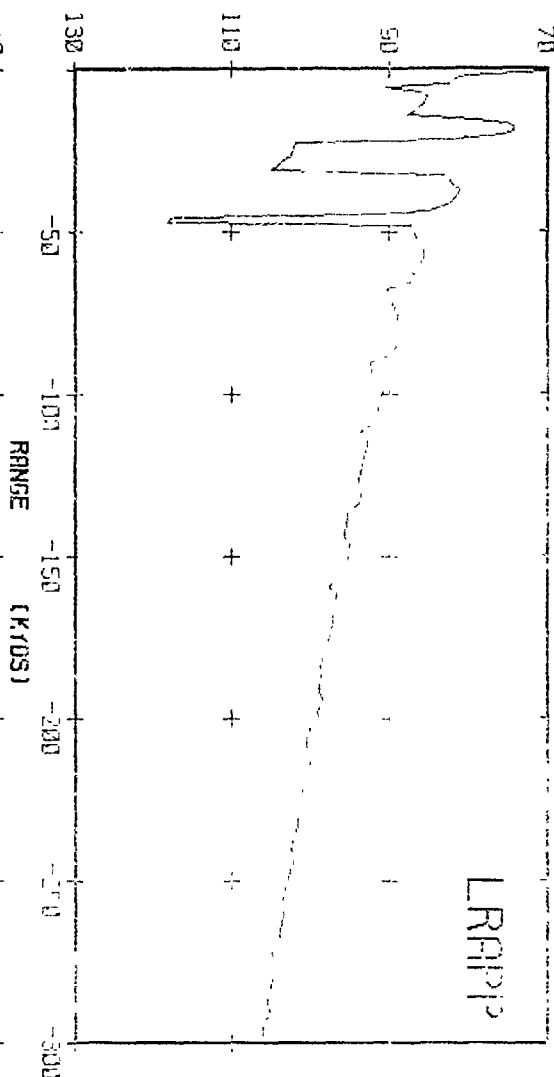


ARRR 3A SUMMIT

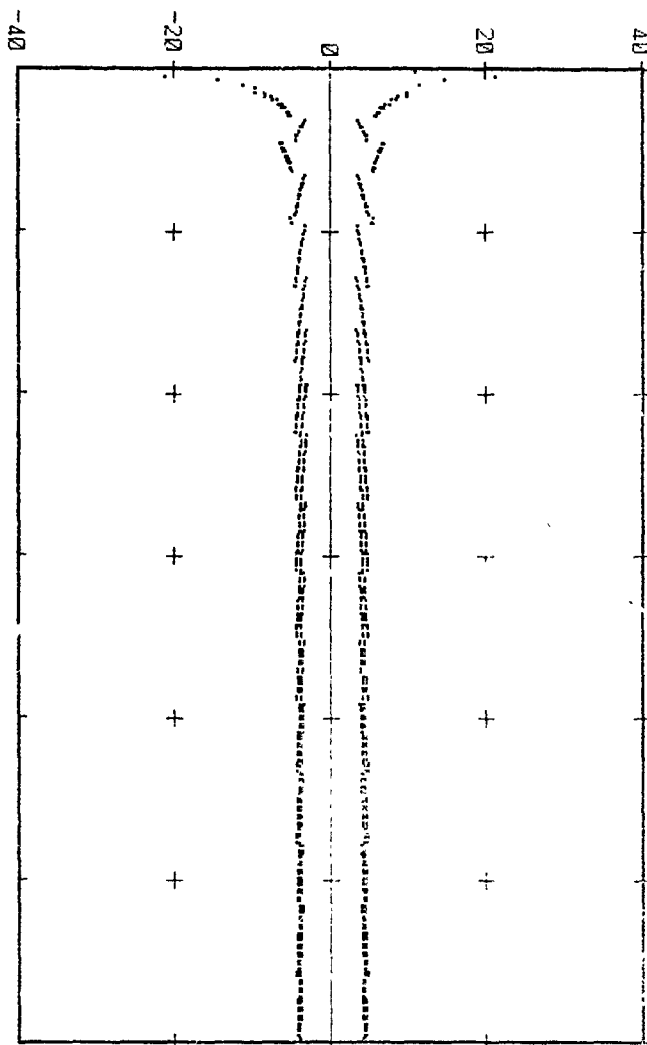
S 233 R 202 F 5200

1450 H 1500 1550

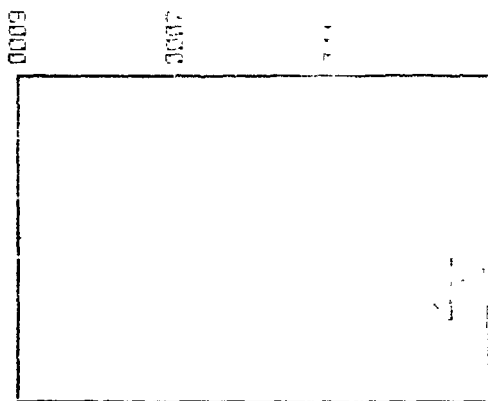
DB LOSS



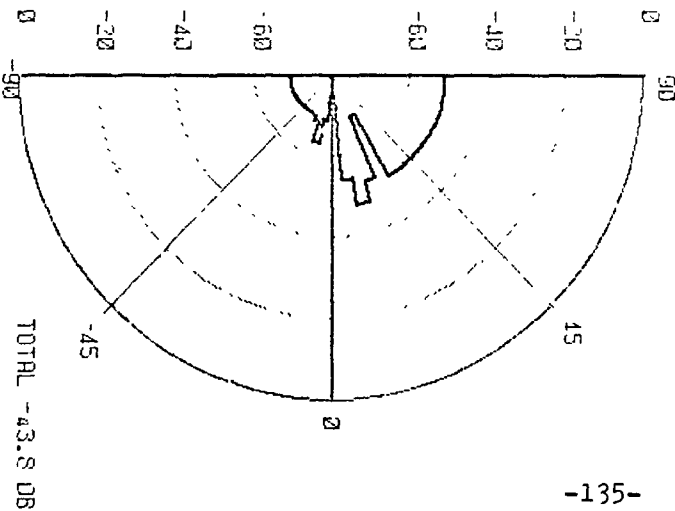
ARRIVAL ANGLE

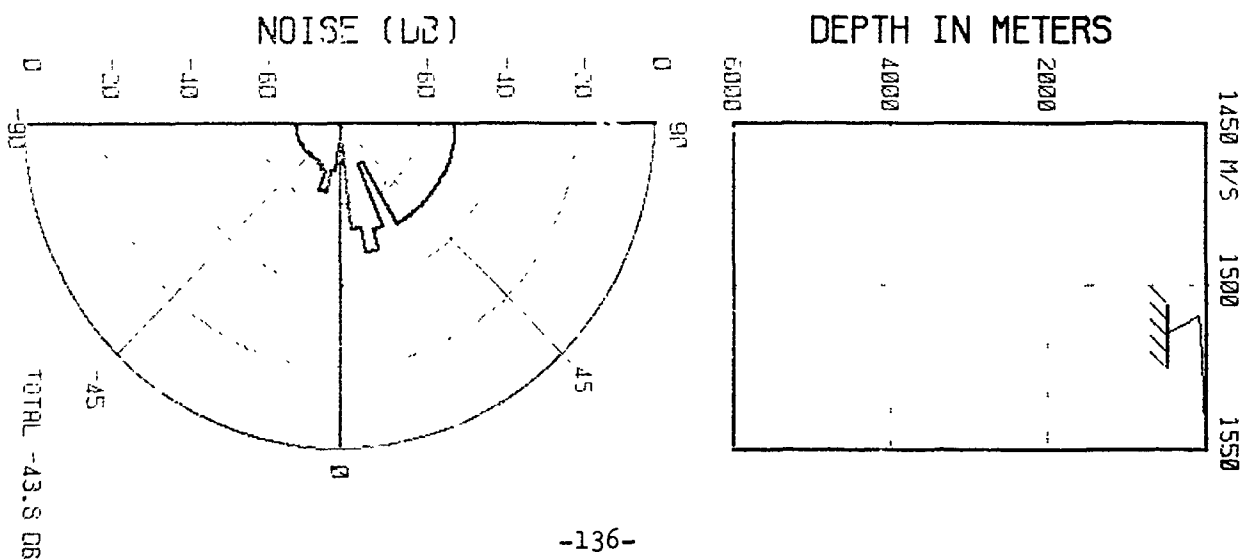
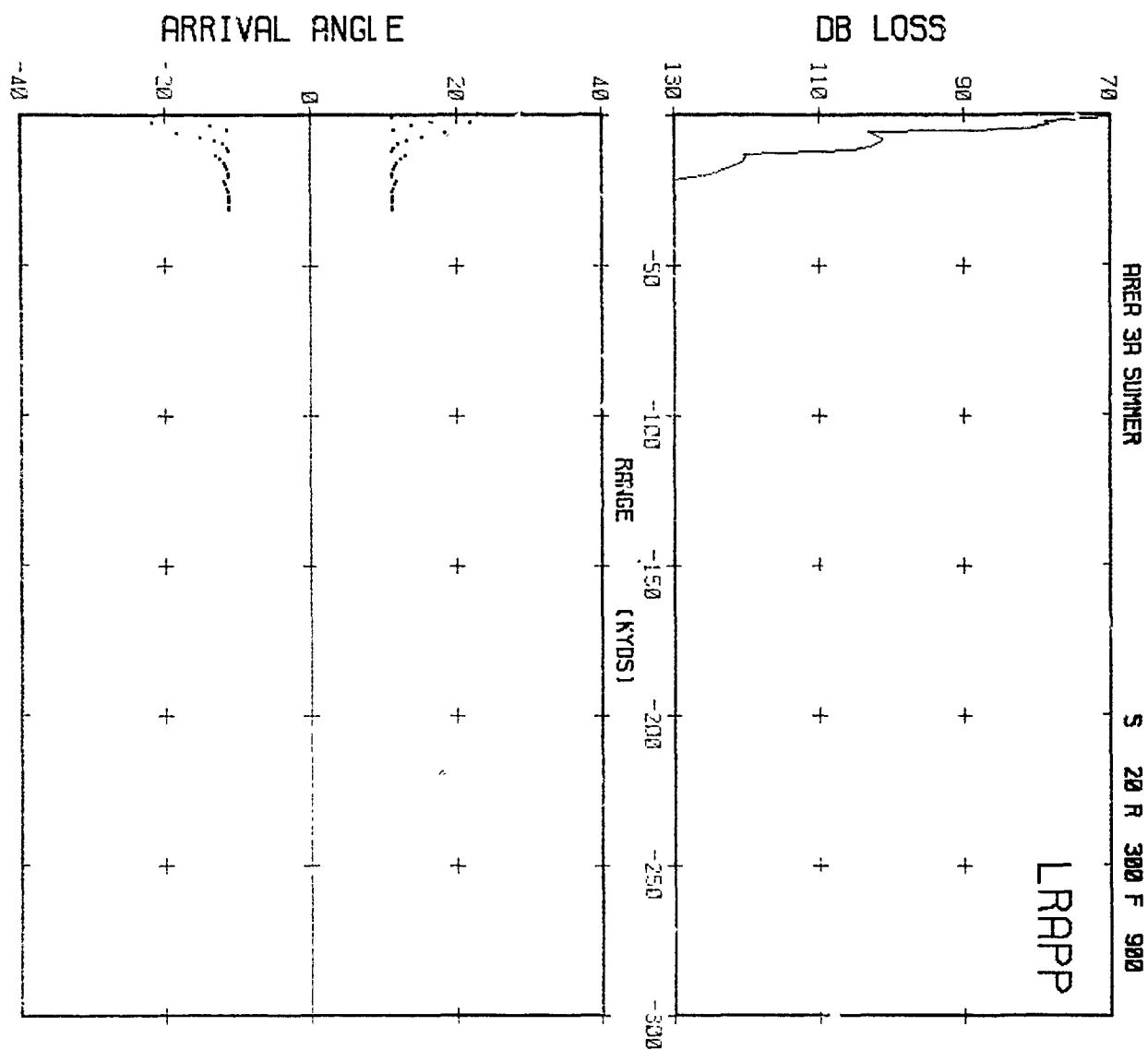


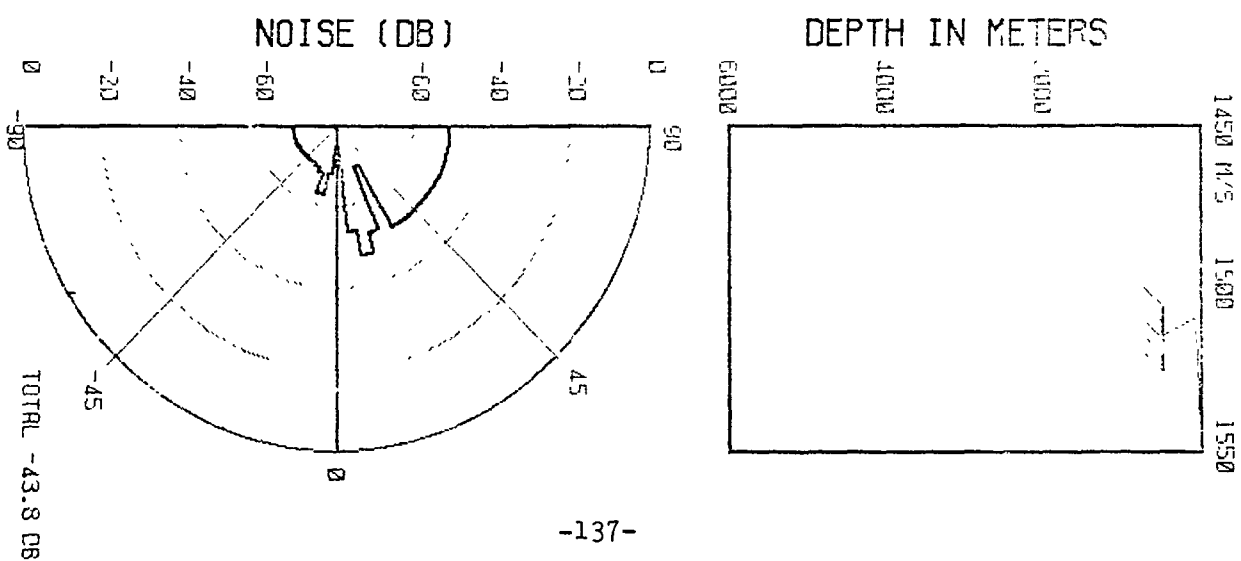
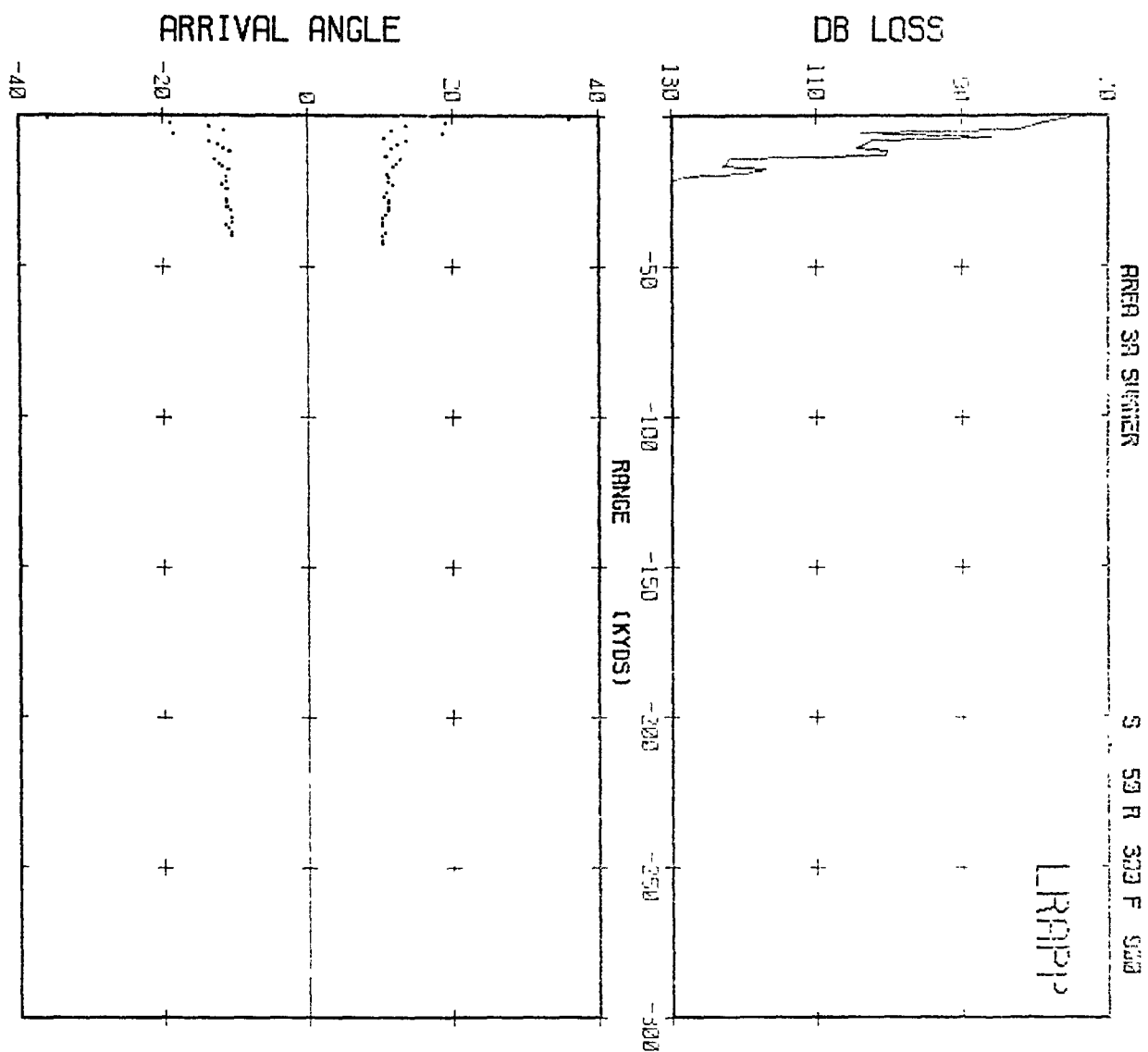
DEPTH IN METERS



NOISE (DB)





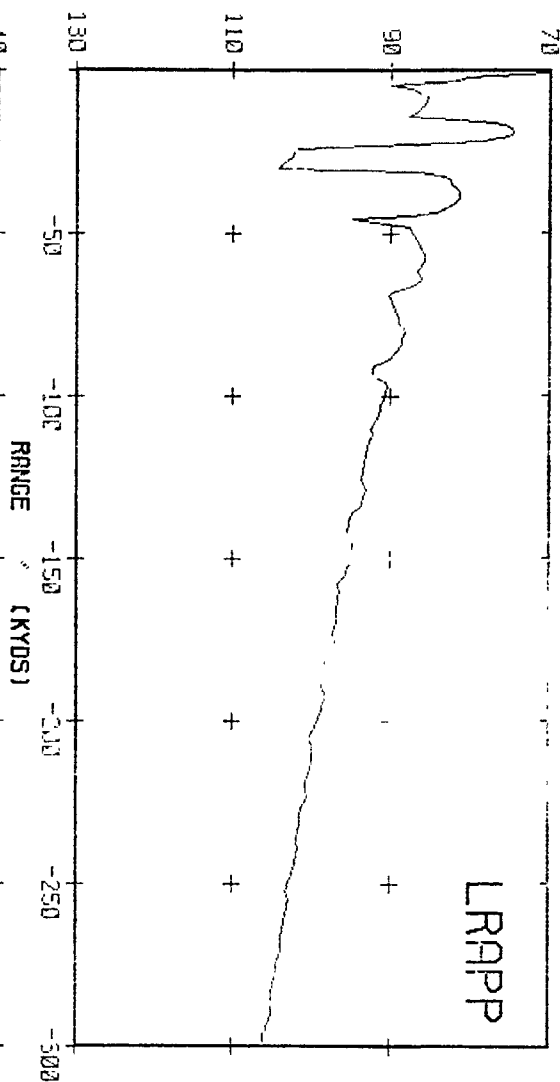


AREA 3A SUMMER

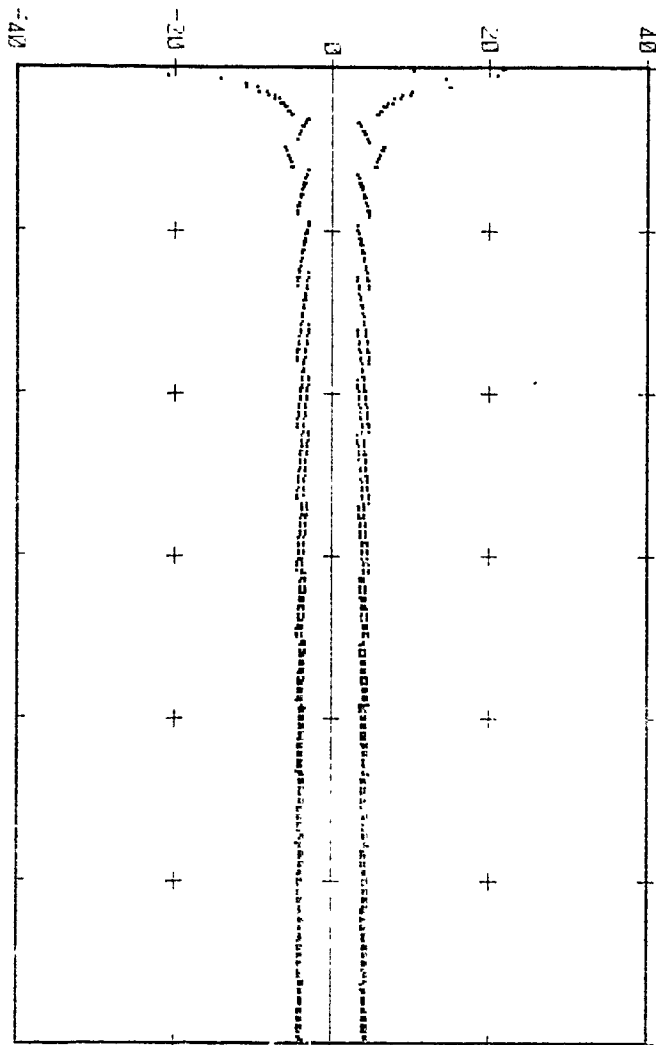
S 233 R 300 F 900

1450 M/S 1500 1550

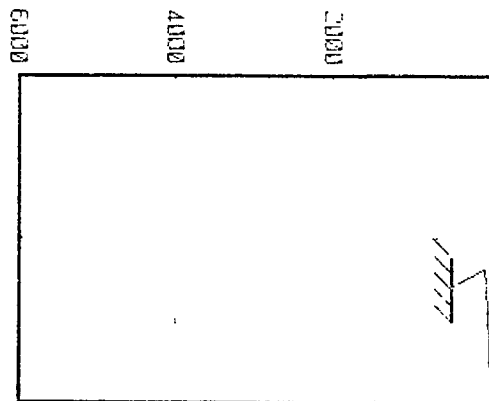
DB LOSS



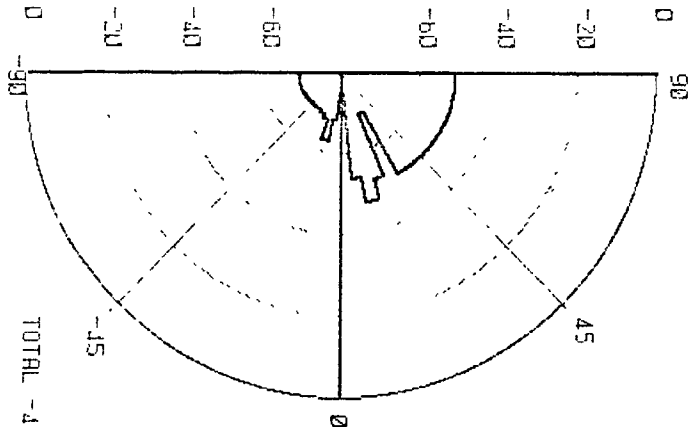
ARRIVAL ANGLE



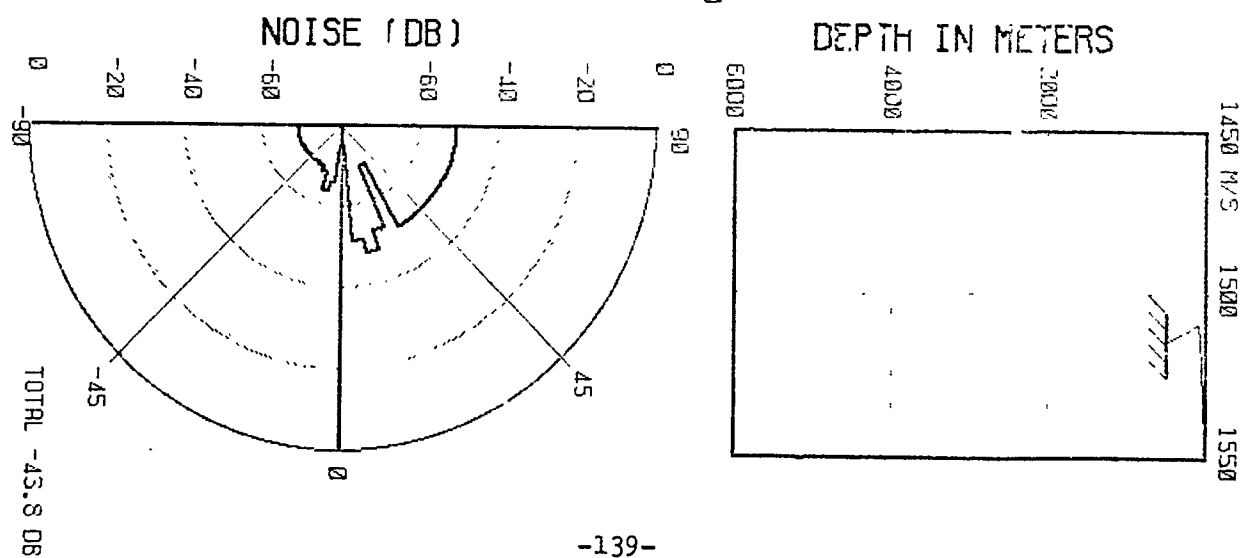
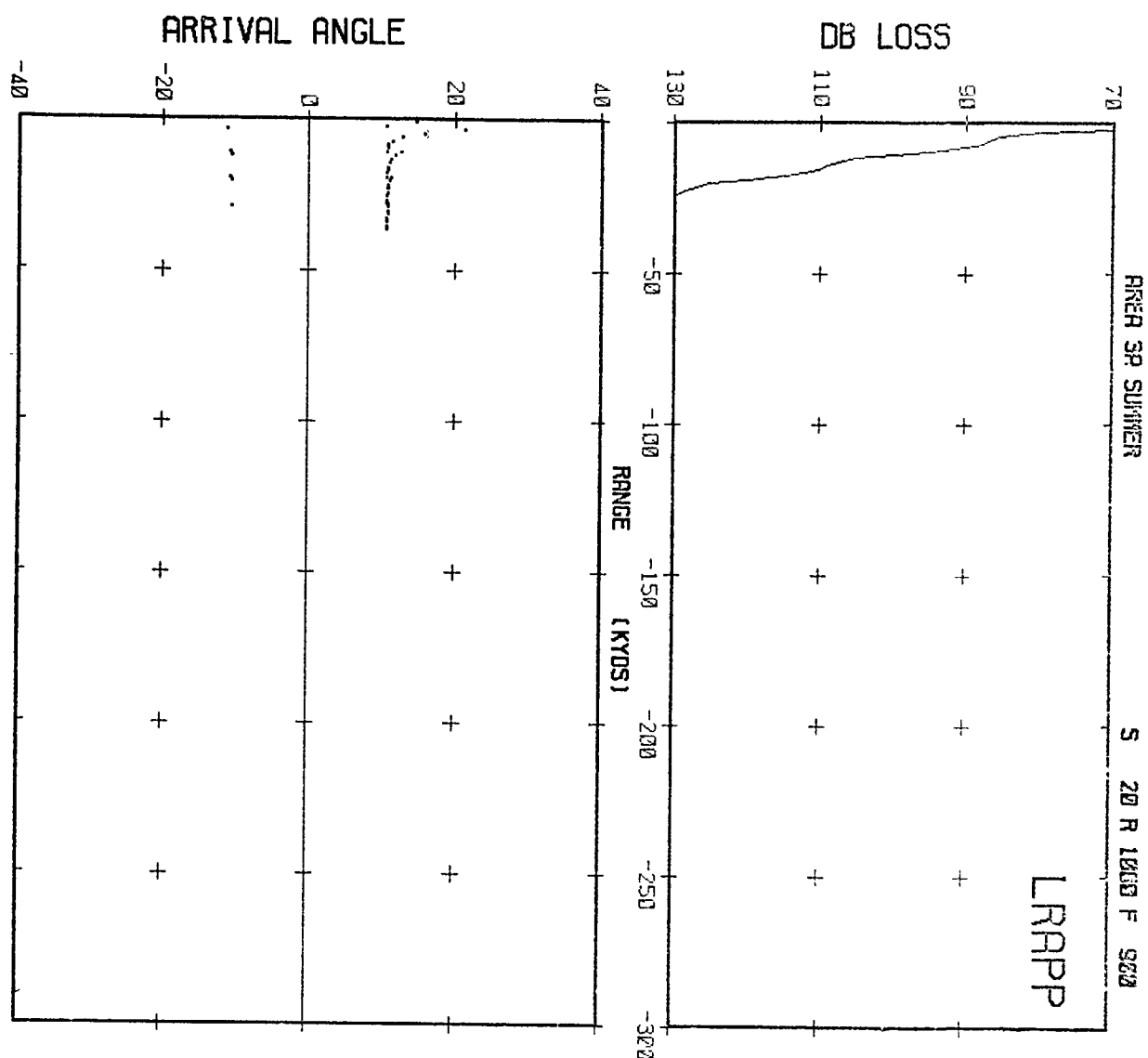
DEPTH IN METERS

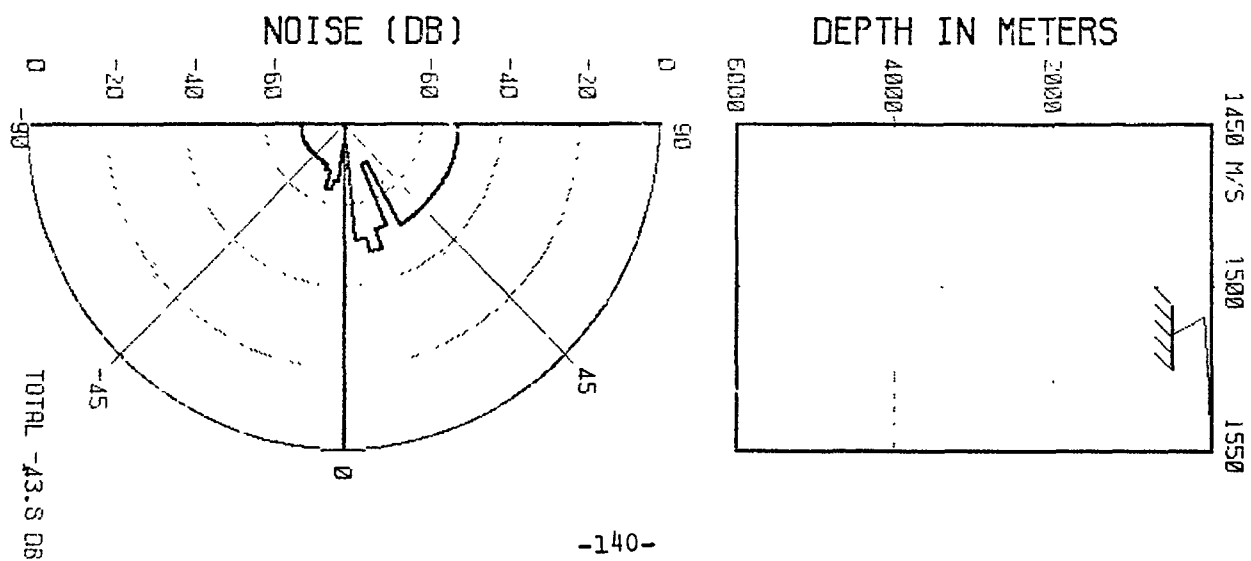
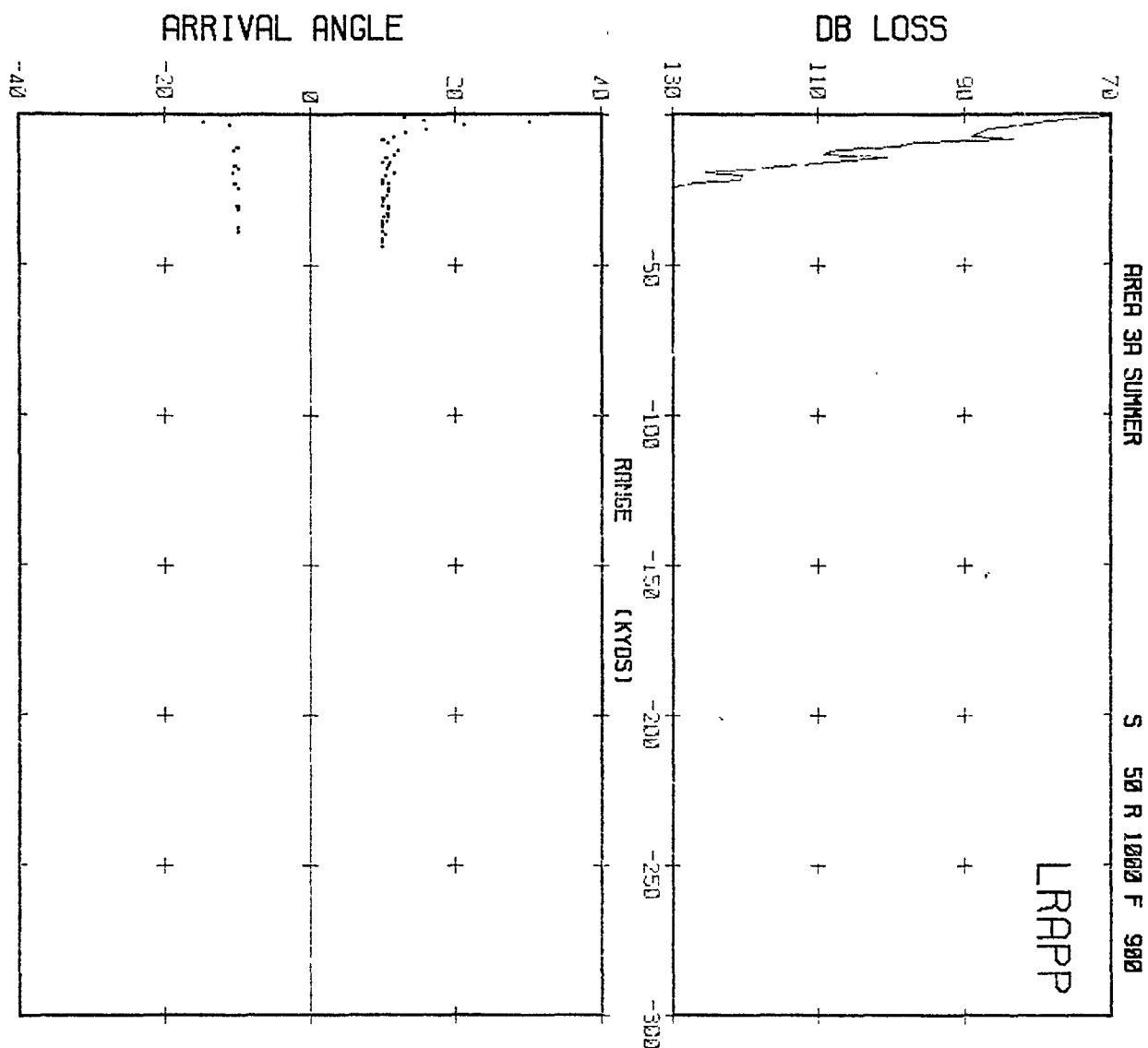


NOISE (DB)



TOTAL -43.8 DB



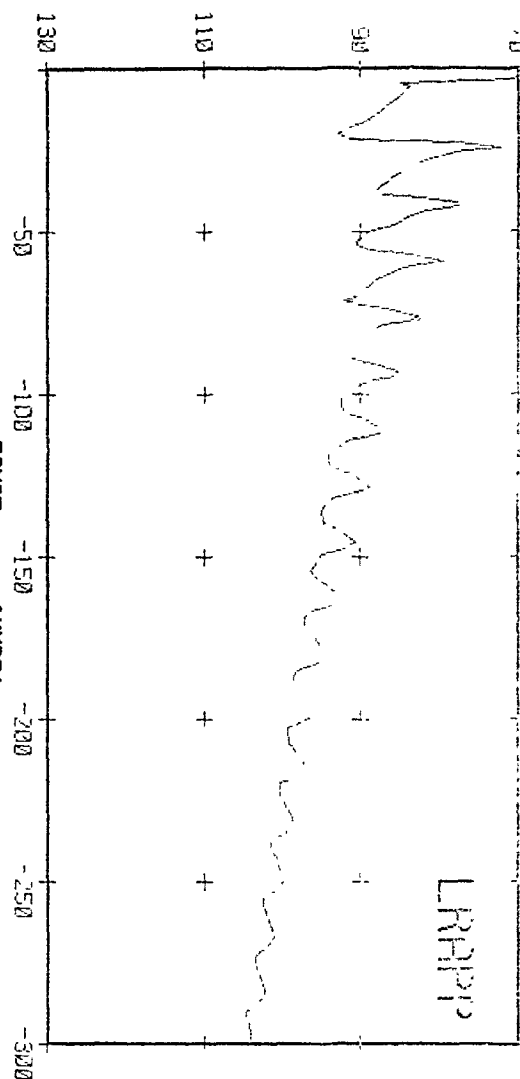


AREA 3R SUMMER

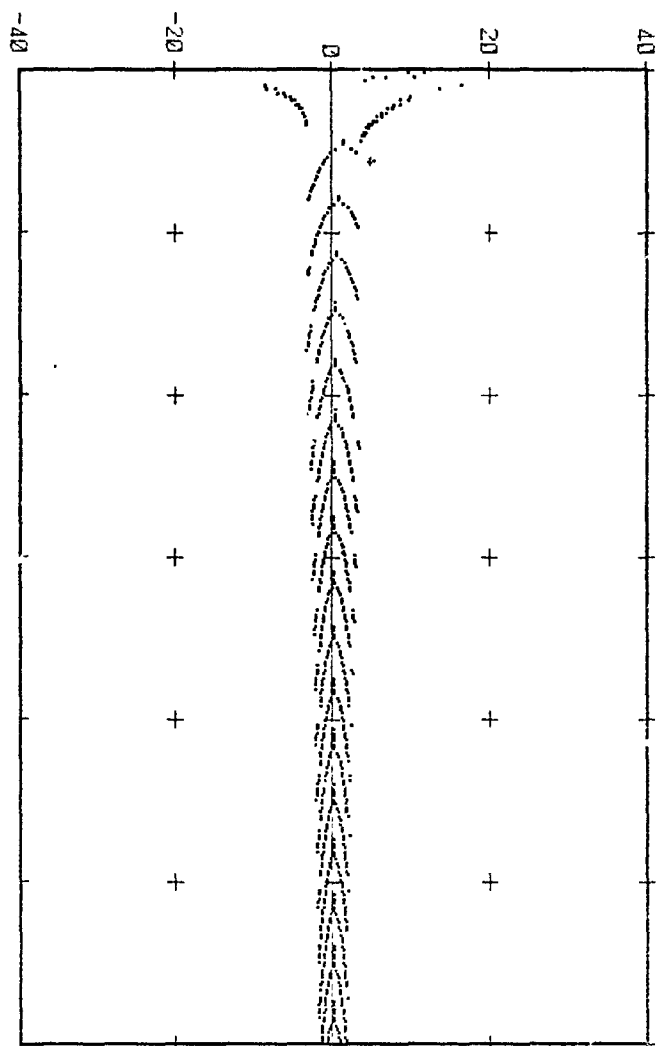
S 283 H 1060 F 900

1450 M/S 1500 1550

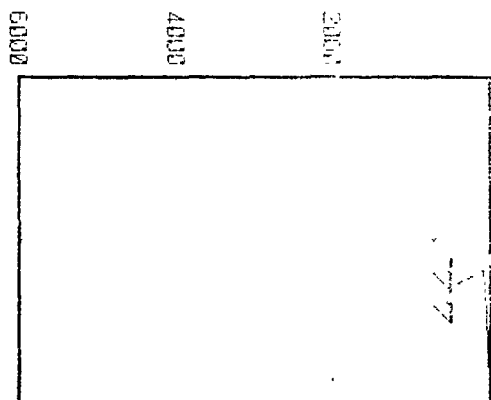
DB LOSS



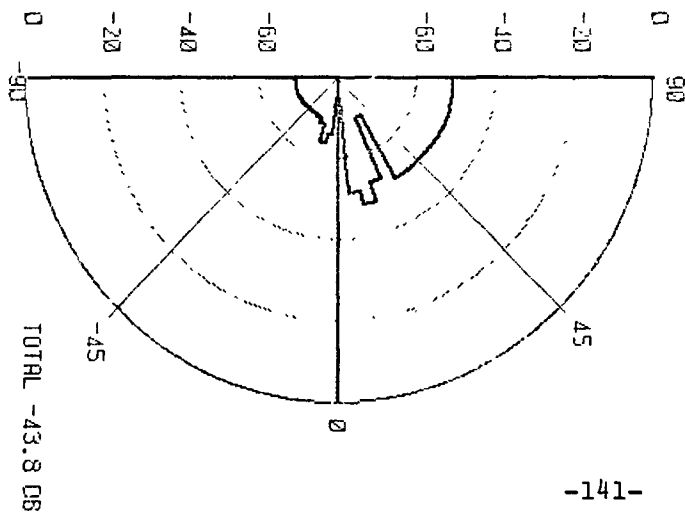
ARRIVAL ANGLE

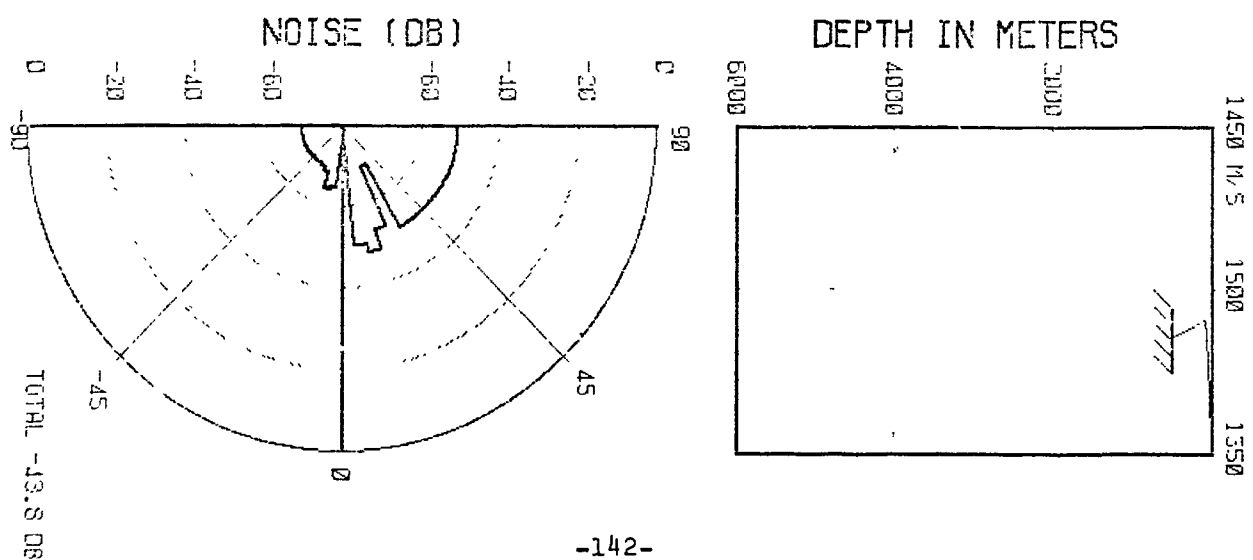
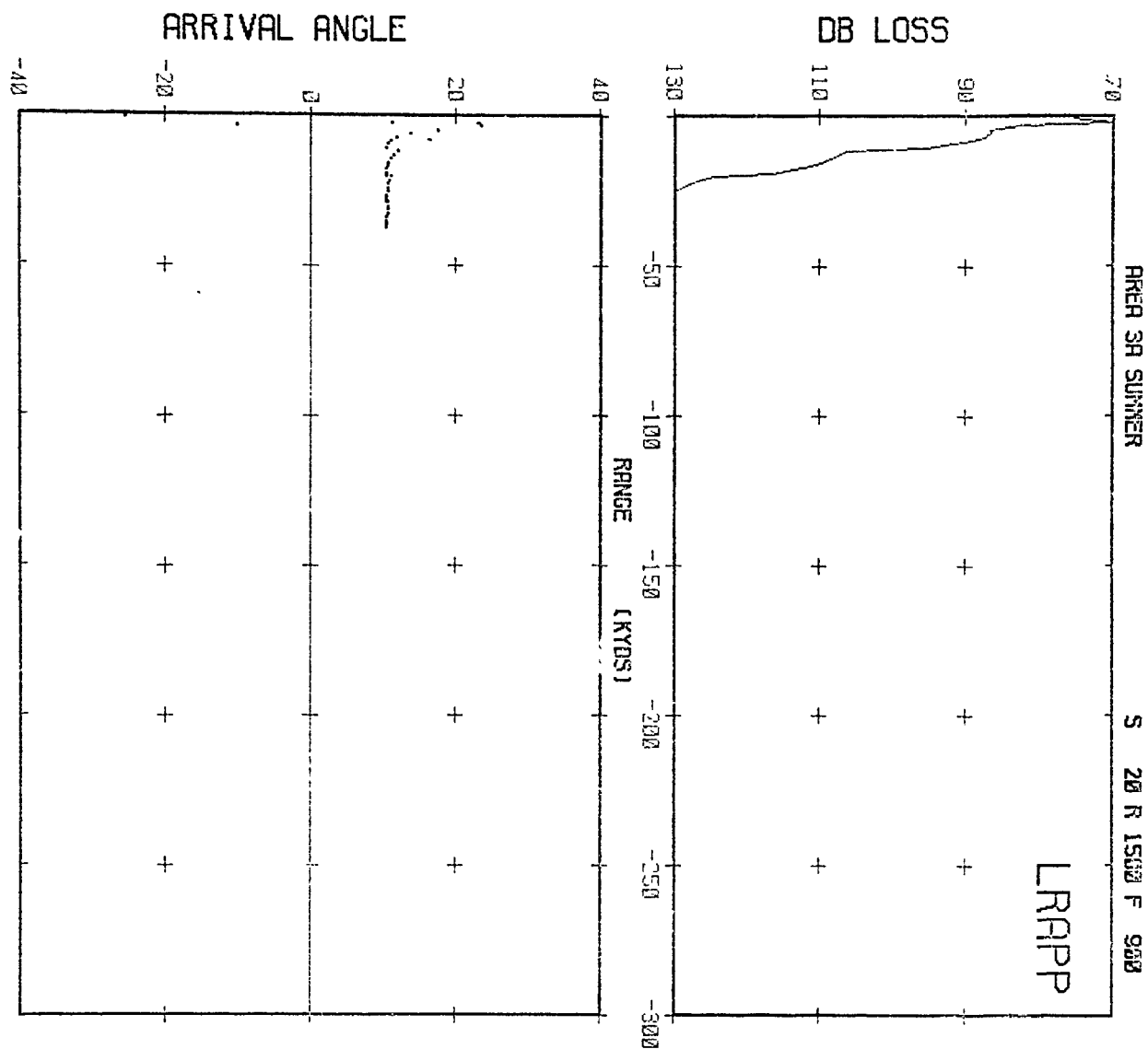


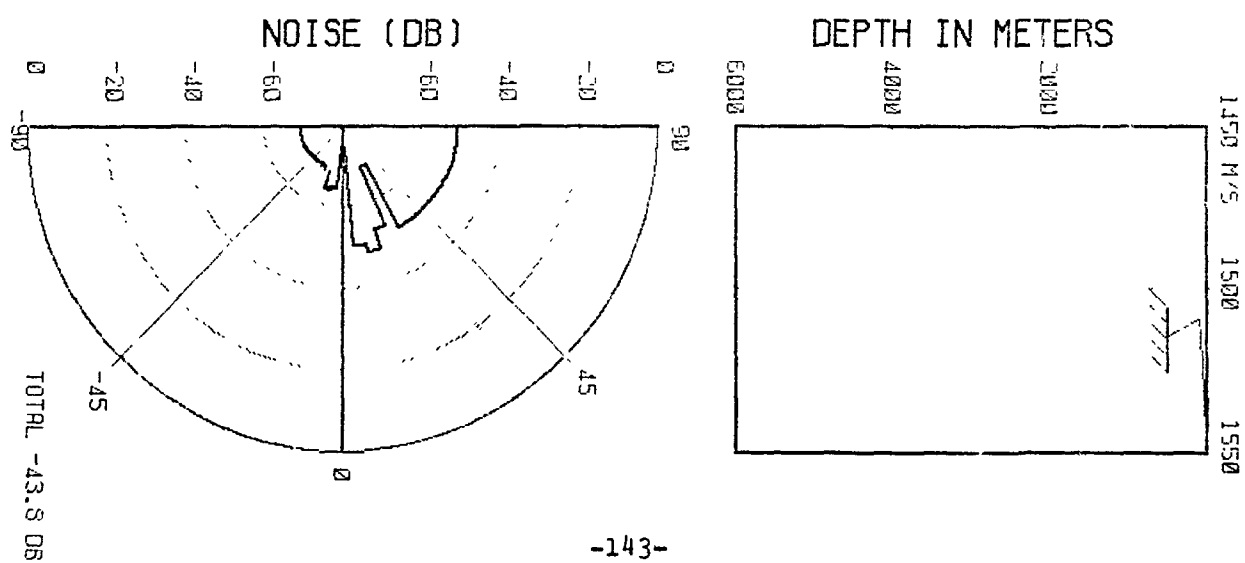
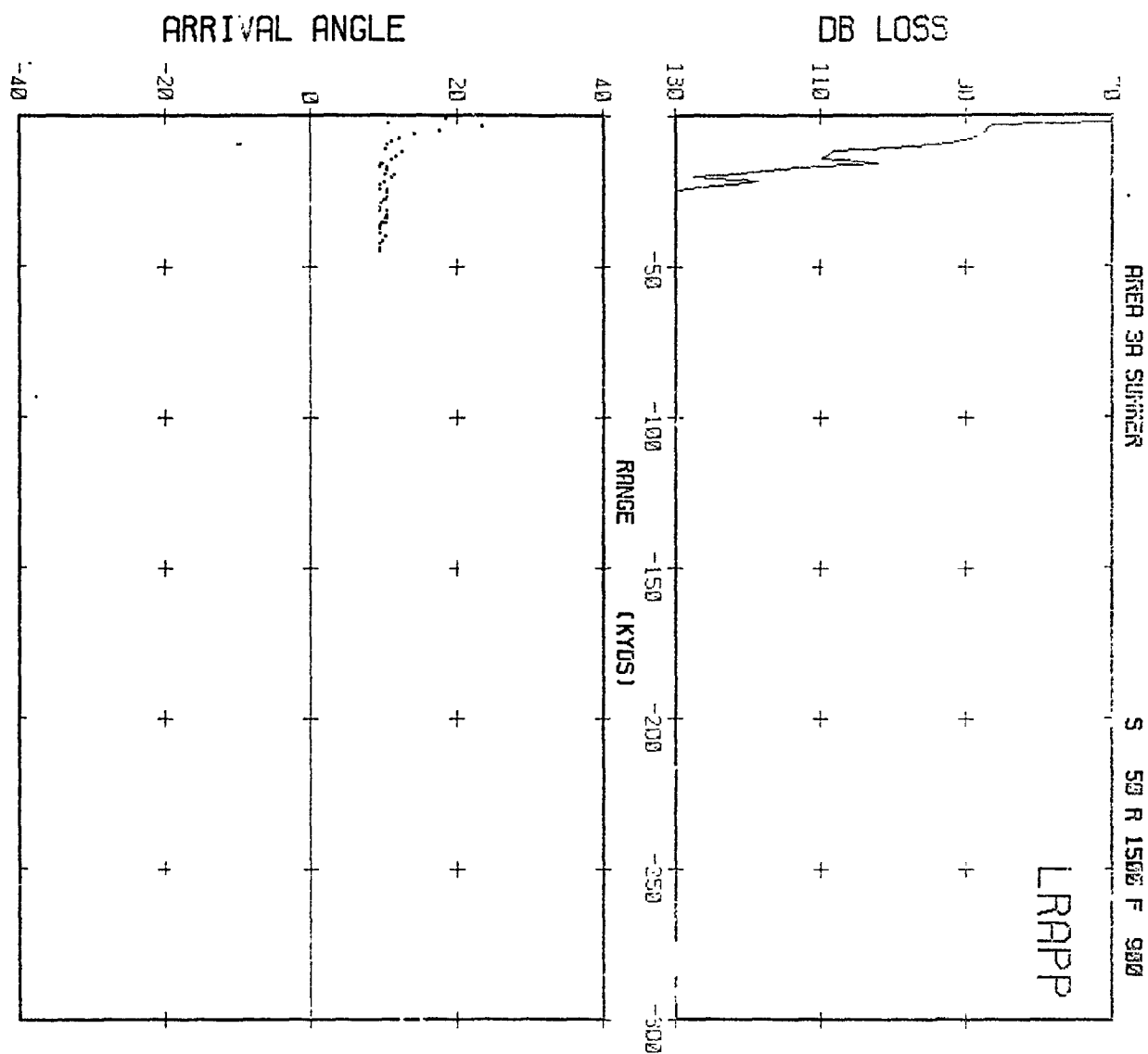
DEPTH IN METERS



NOISE (DB)





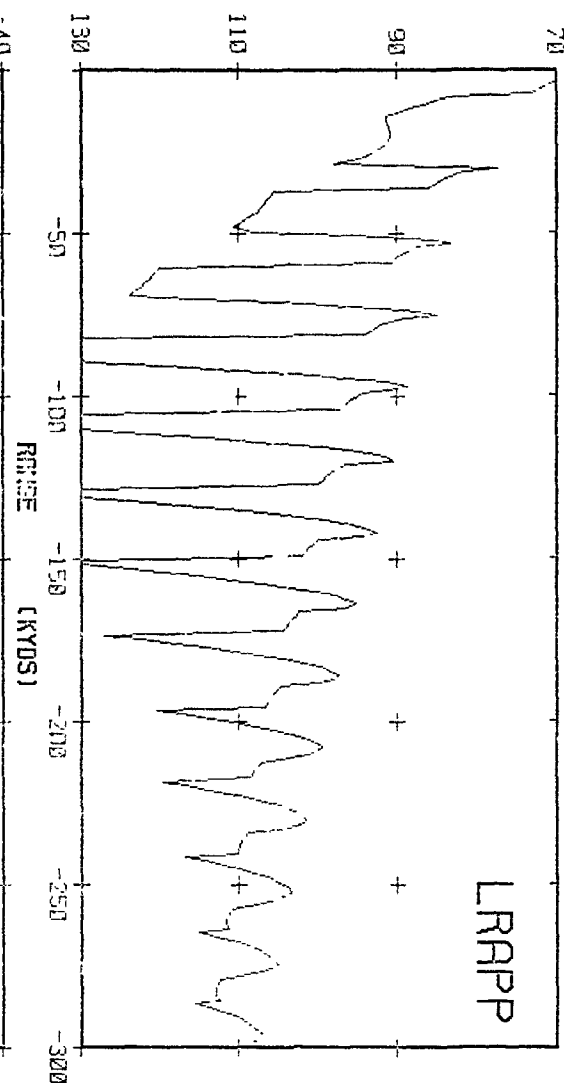


RRR 3R SUMMER

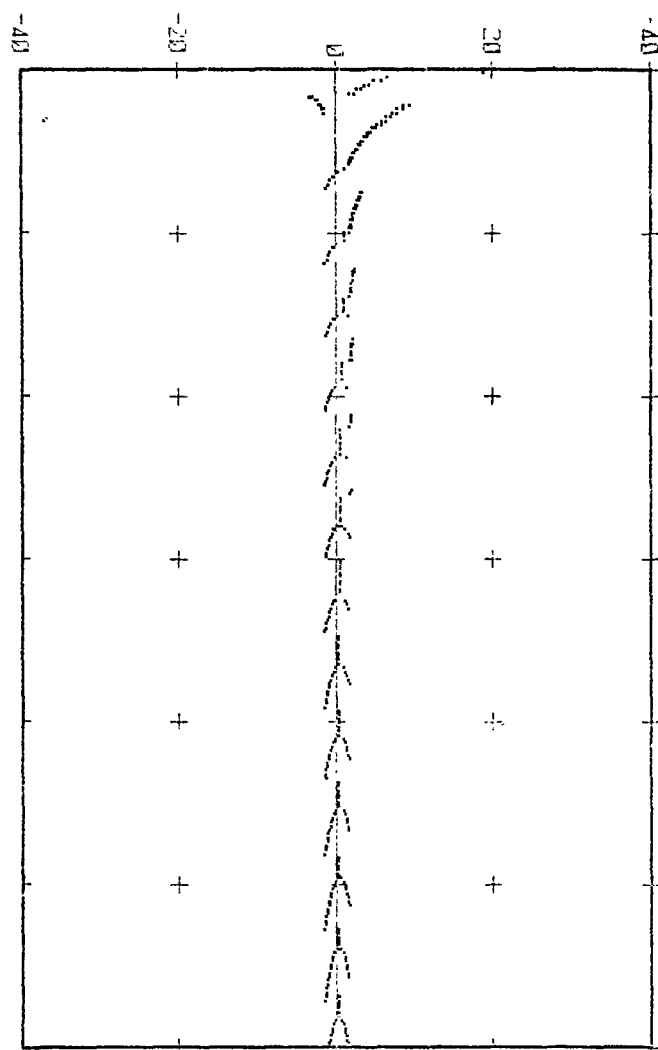
S 233 R 1500 F 980

1450 M/S 1500 1550

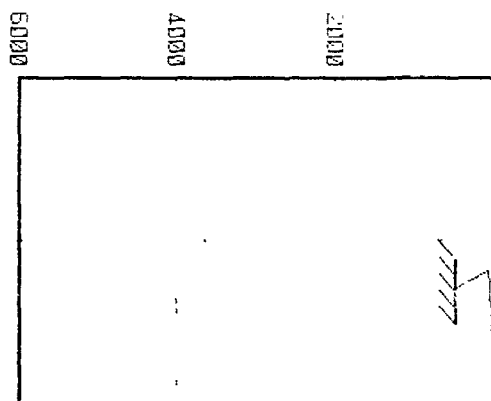
DB LOSS



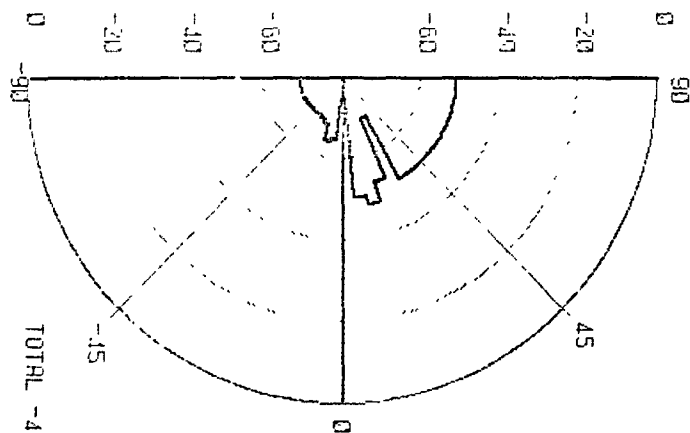
ARRIVAL ANGLE



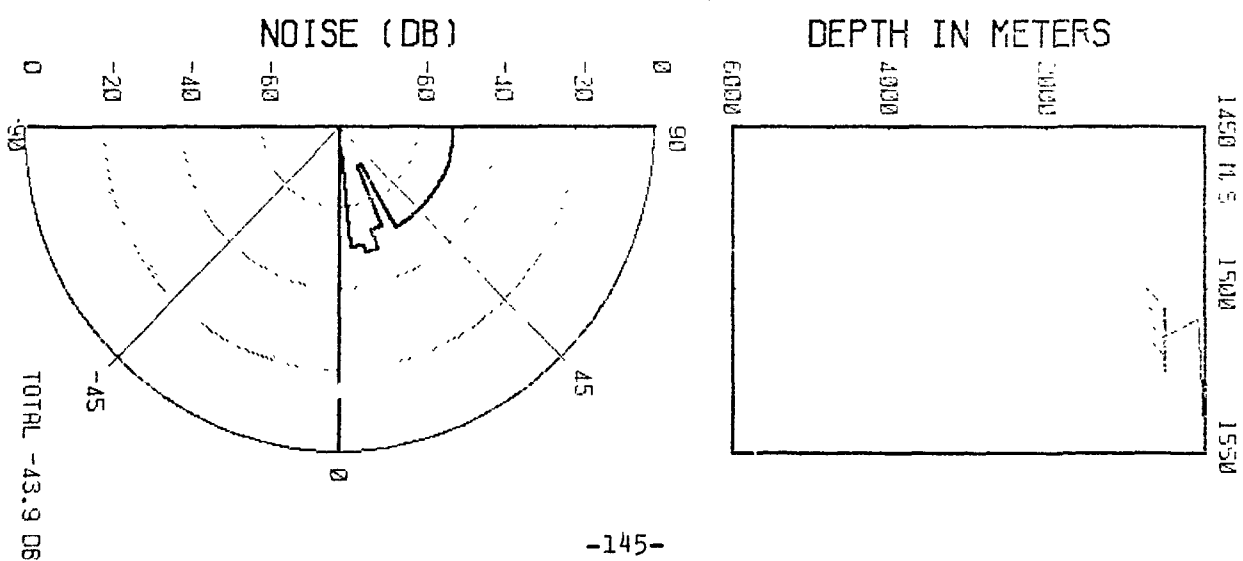
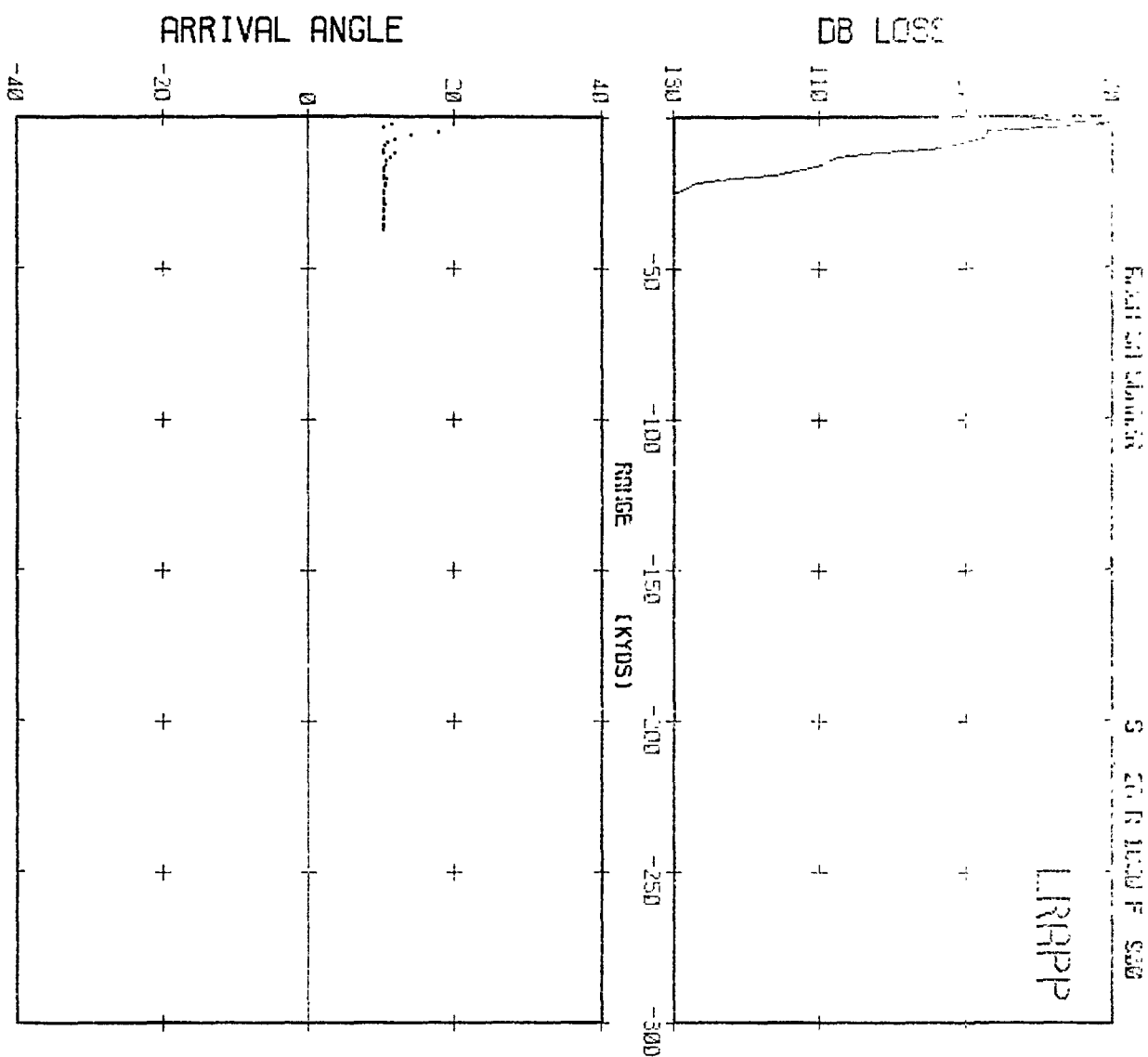
DEPTH IN METERS

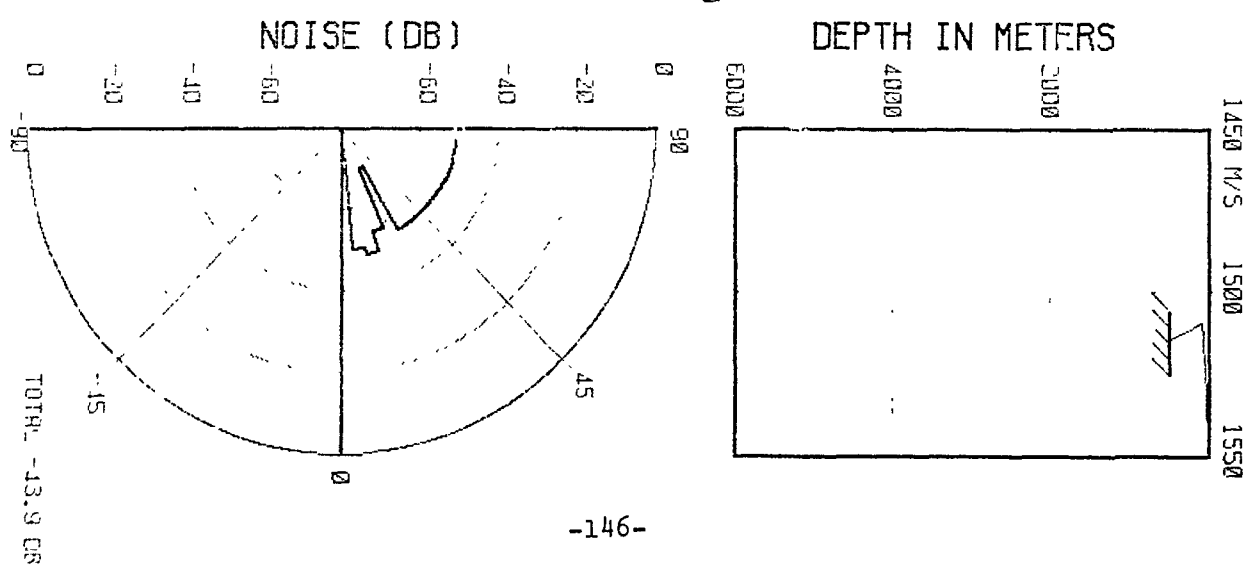
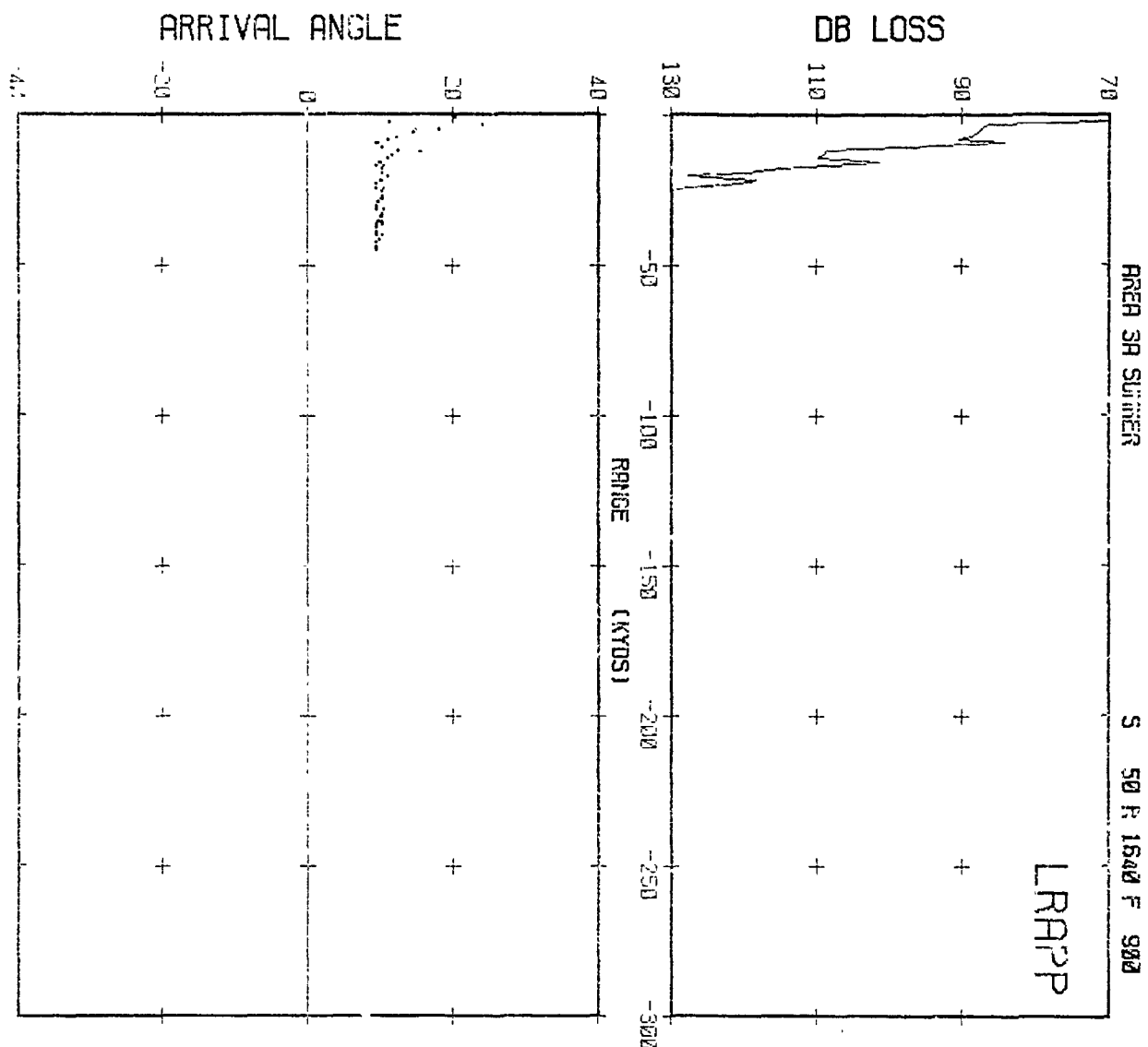


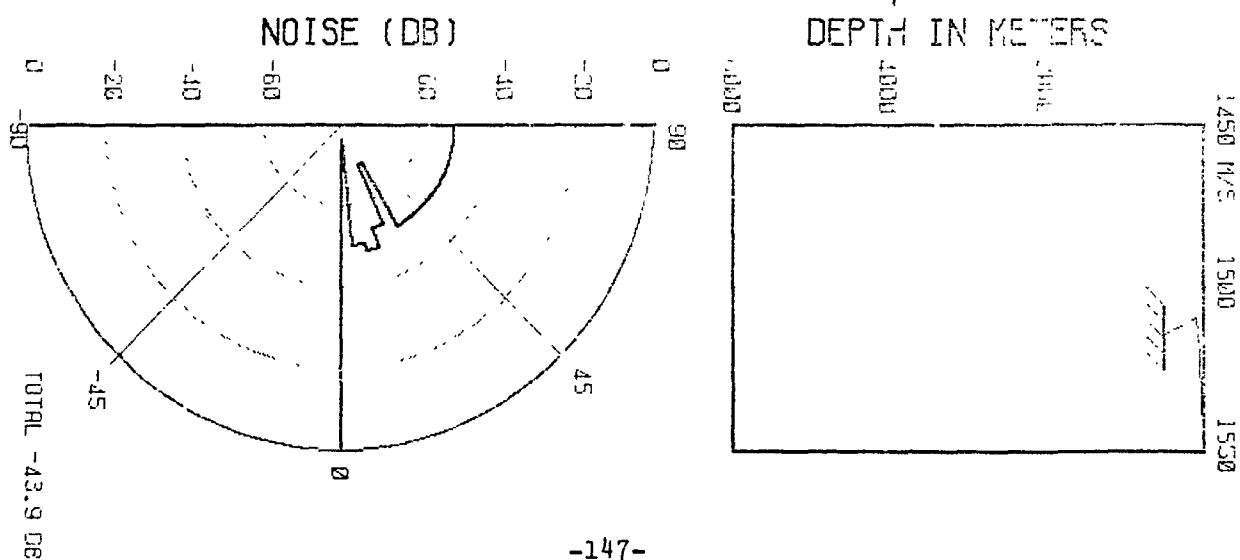
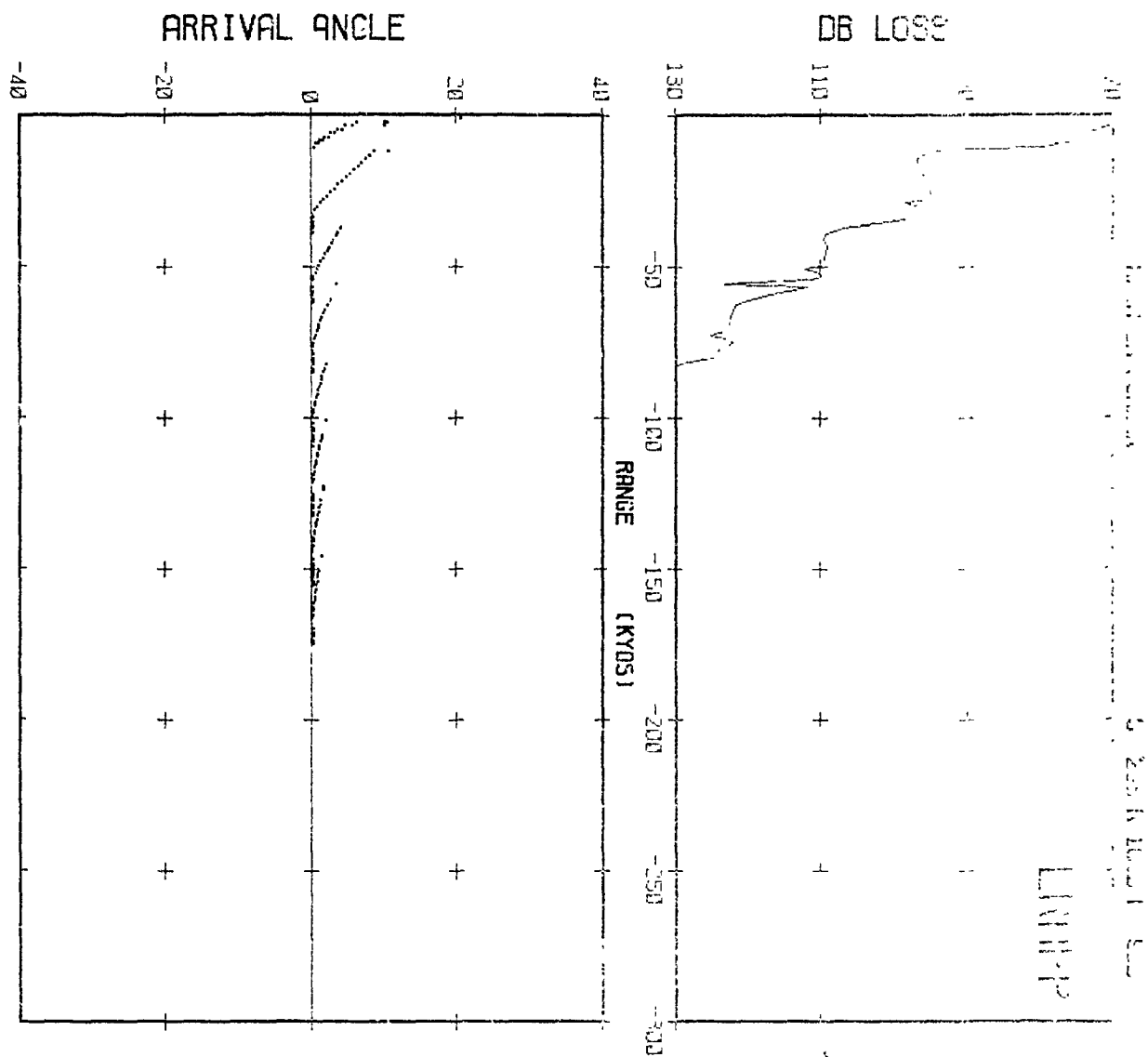
NOISE (DB)

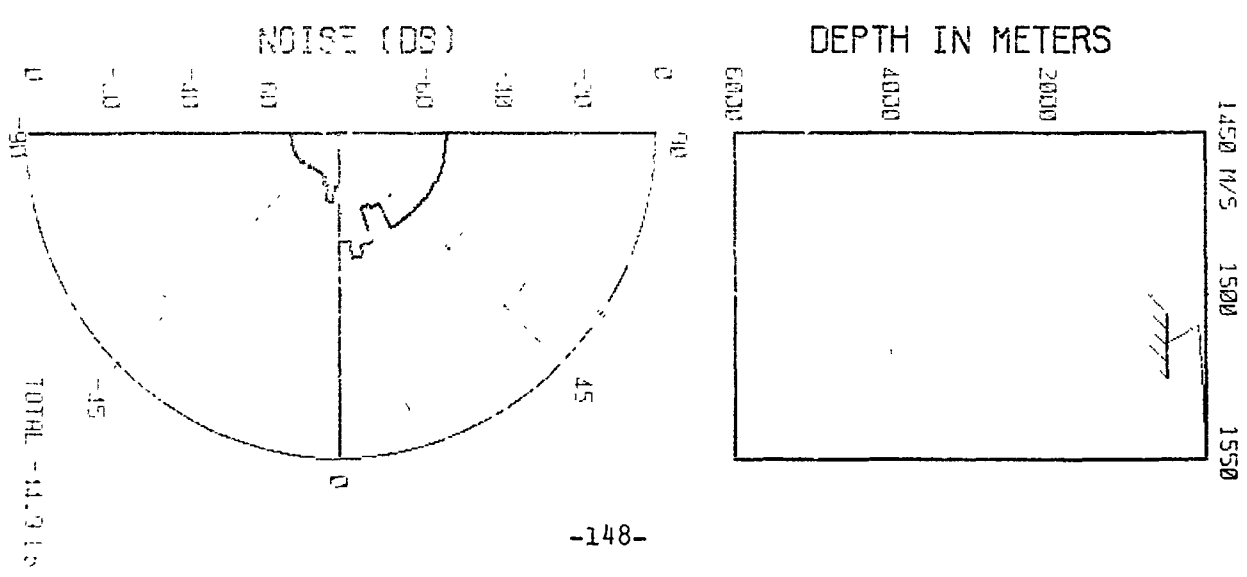
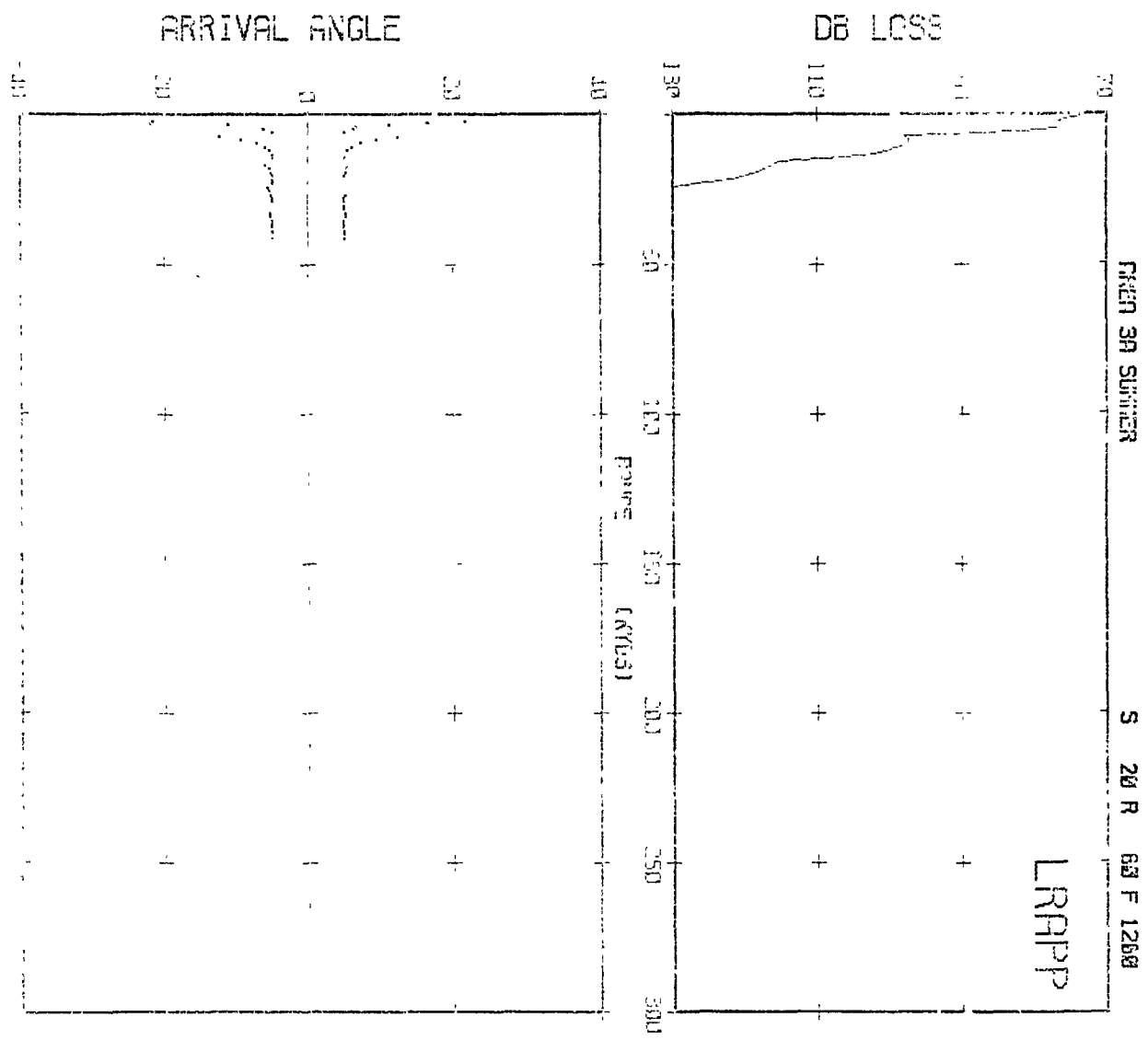


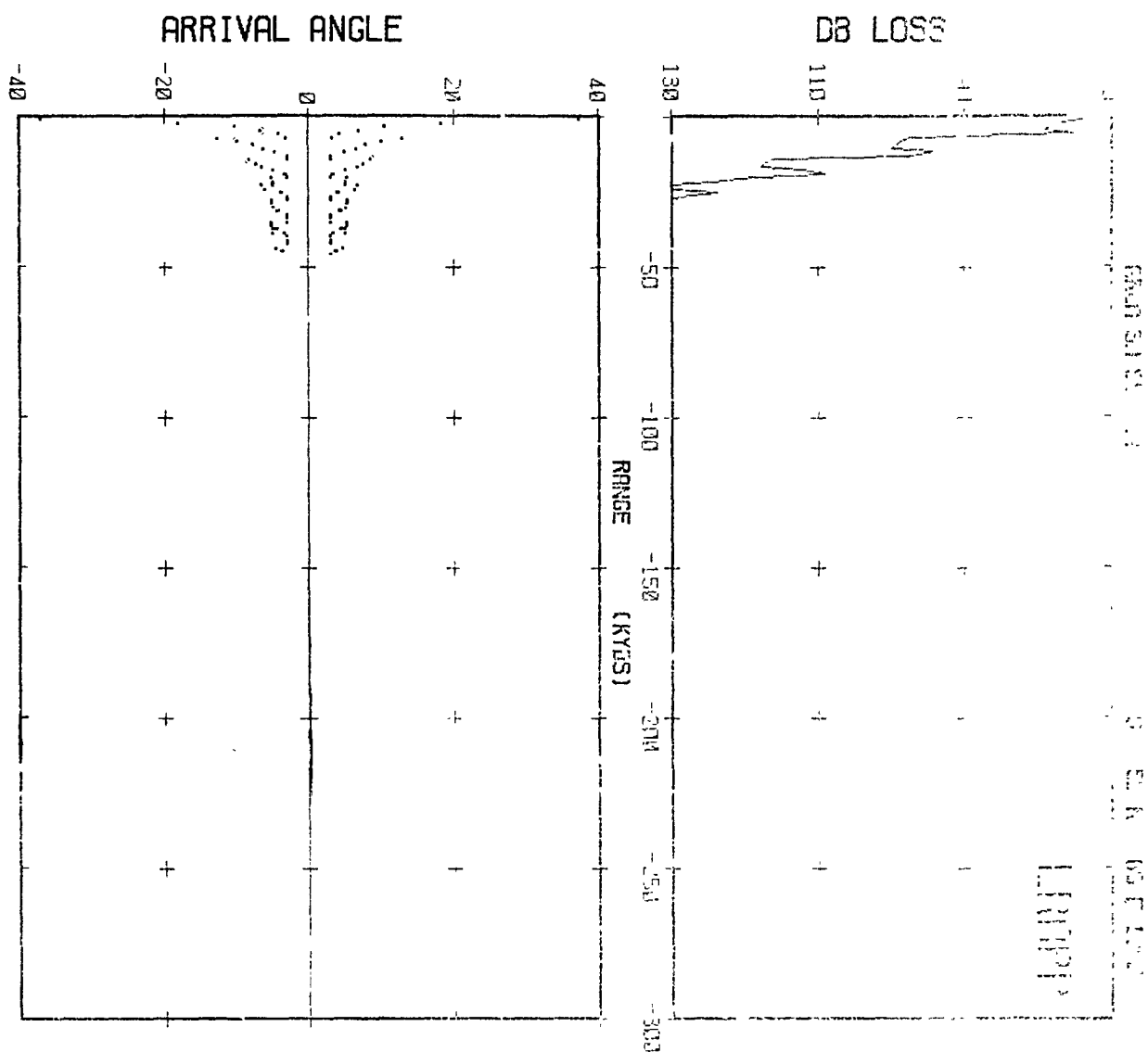
TOTAL -43.8 06

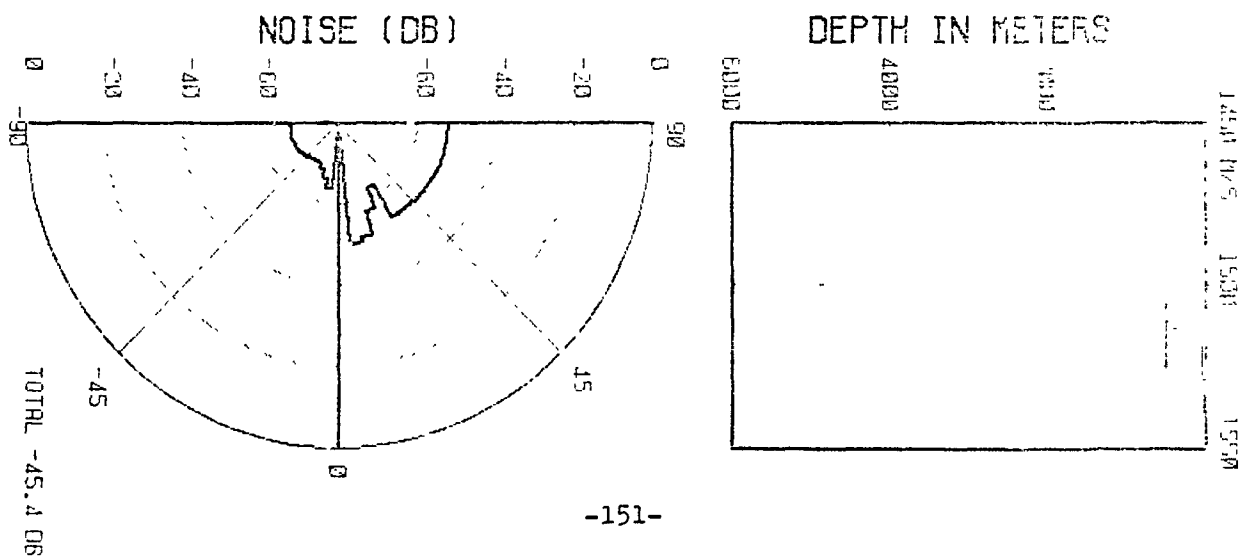
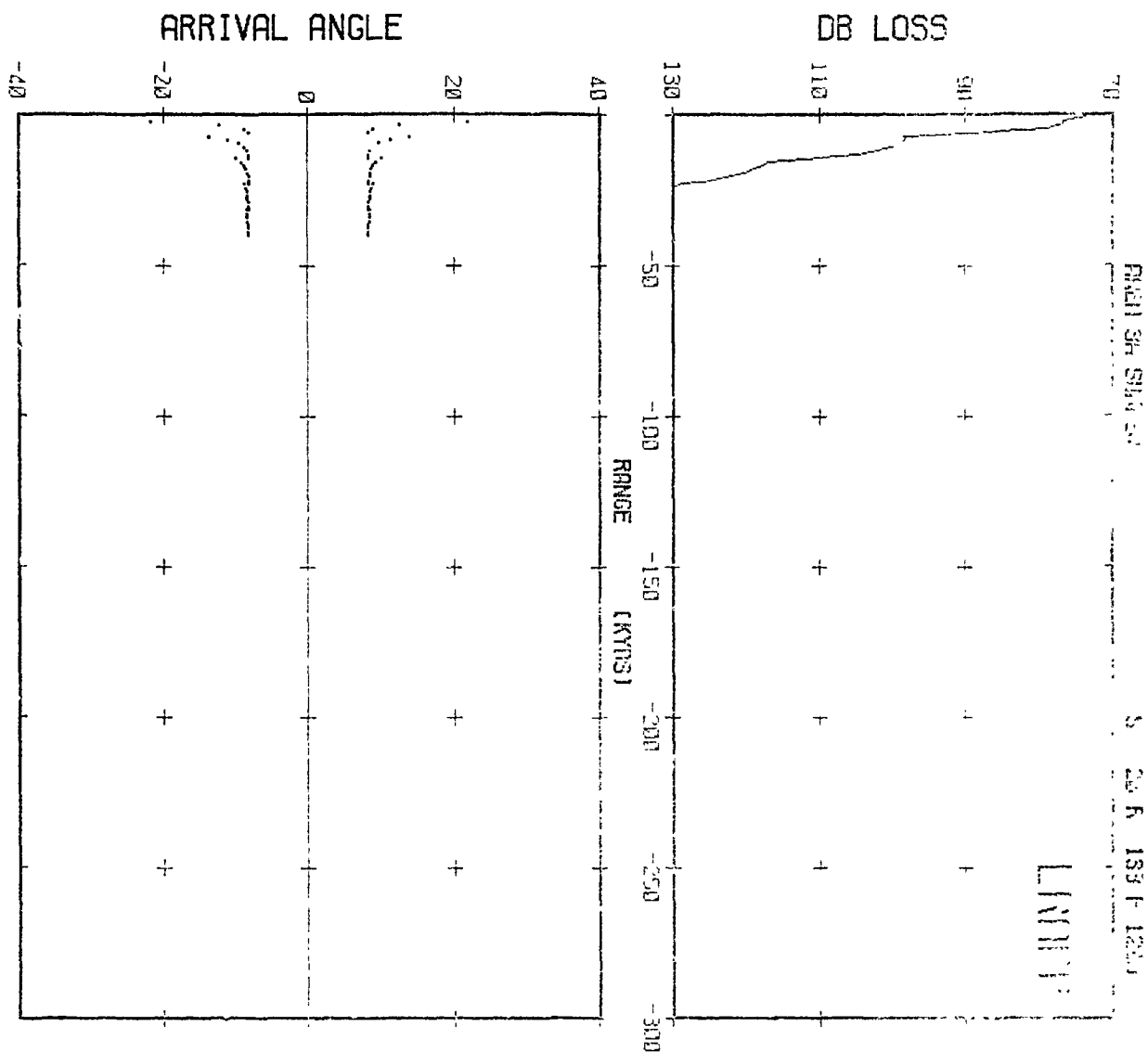


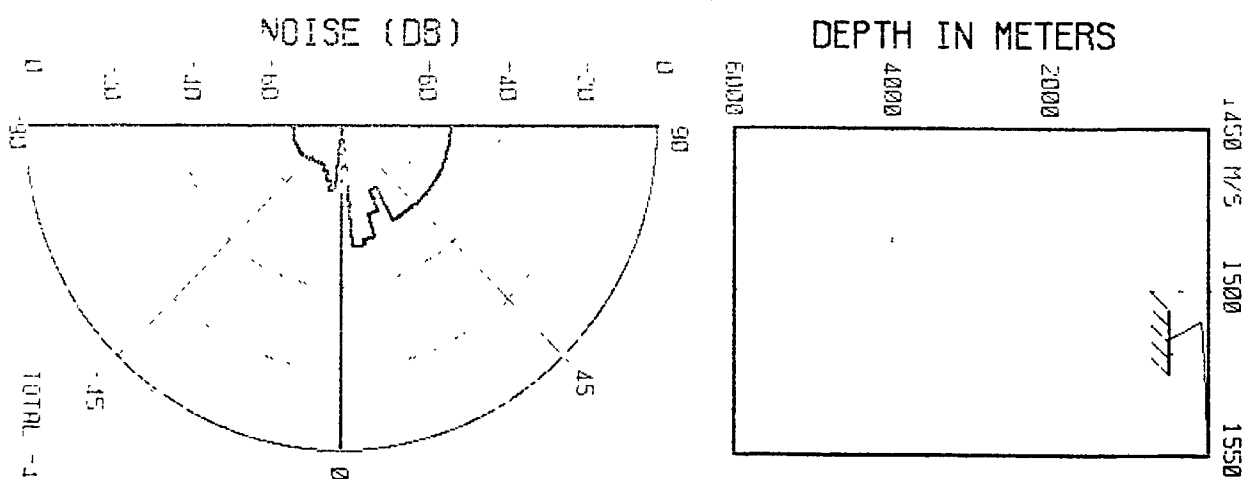
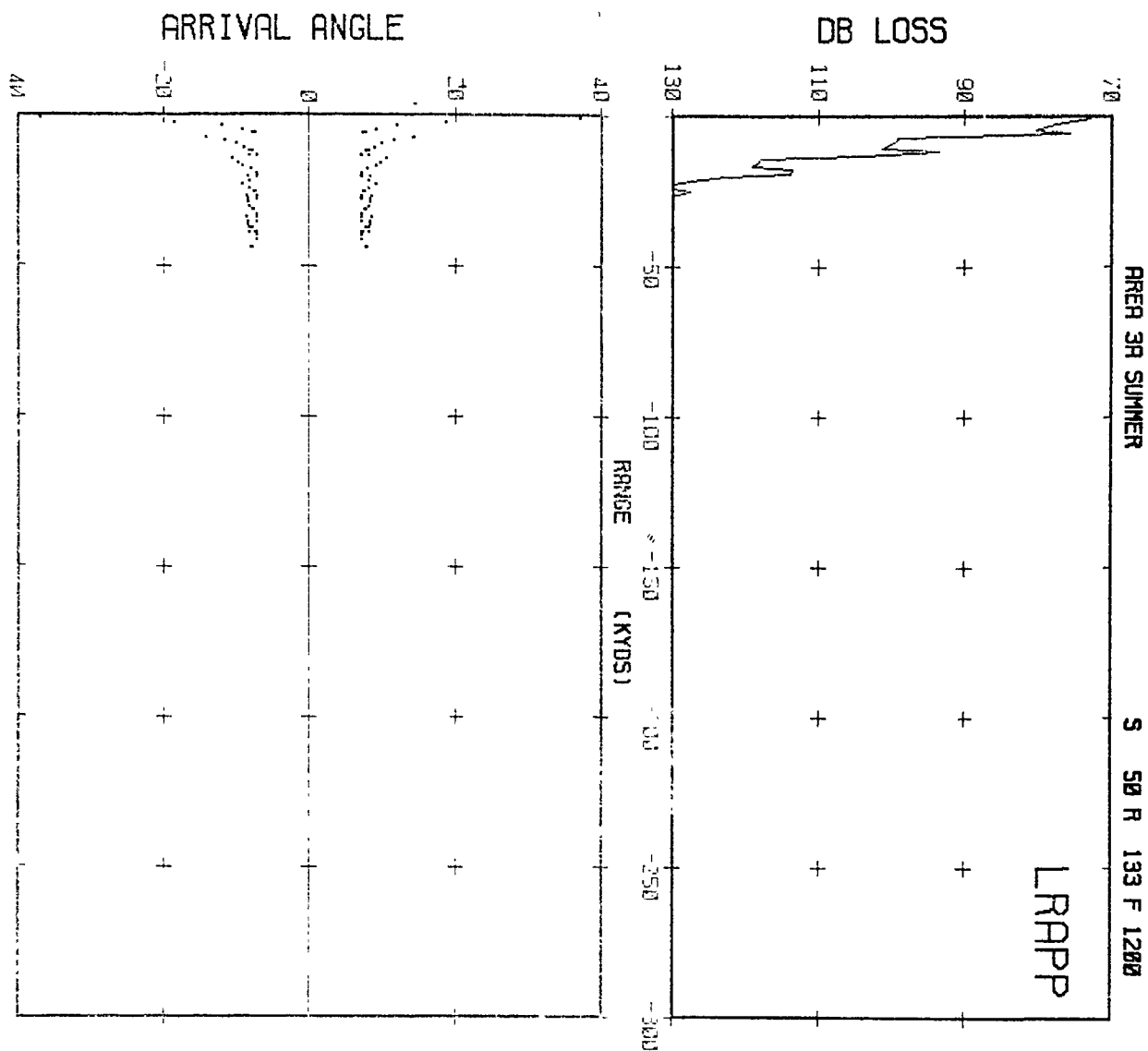












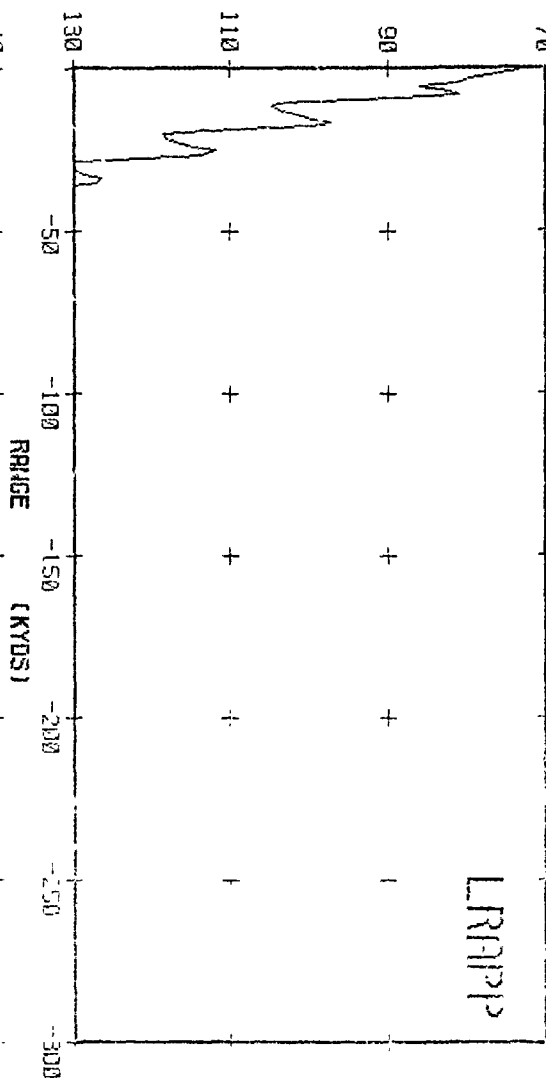
AREA 3A SUMMER

S 293 R 153 F 1220

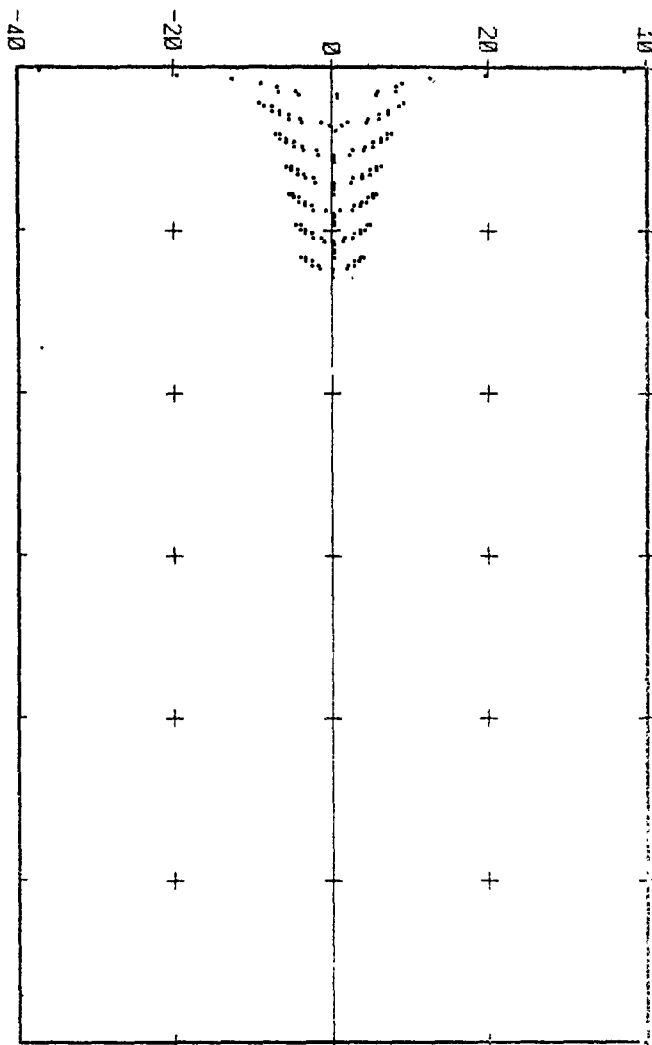
1450 11/5 1500

1550

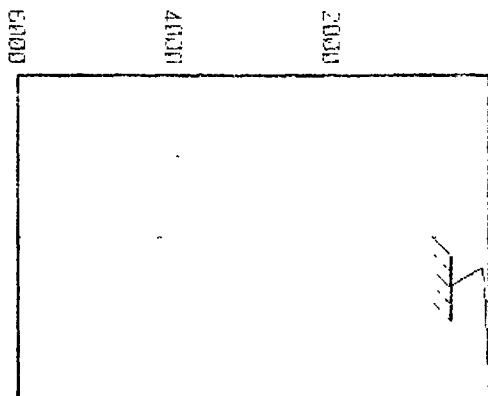
DB LOSS



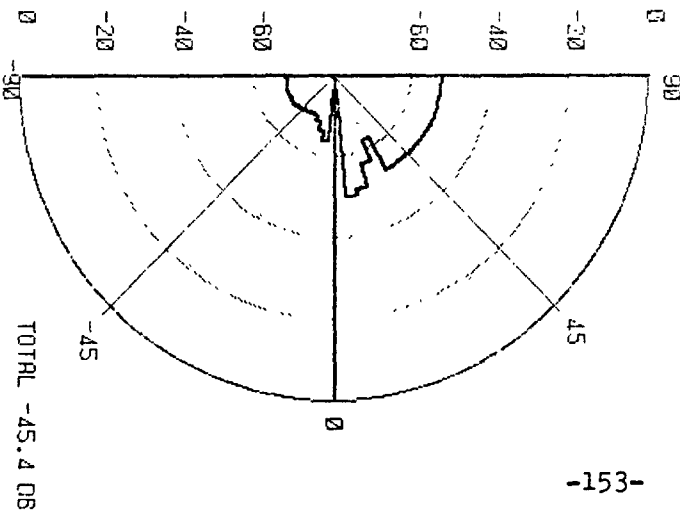
ARRIVAL ANGLE

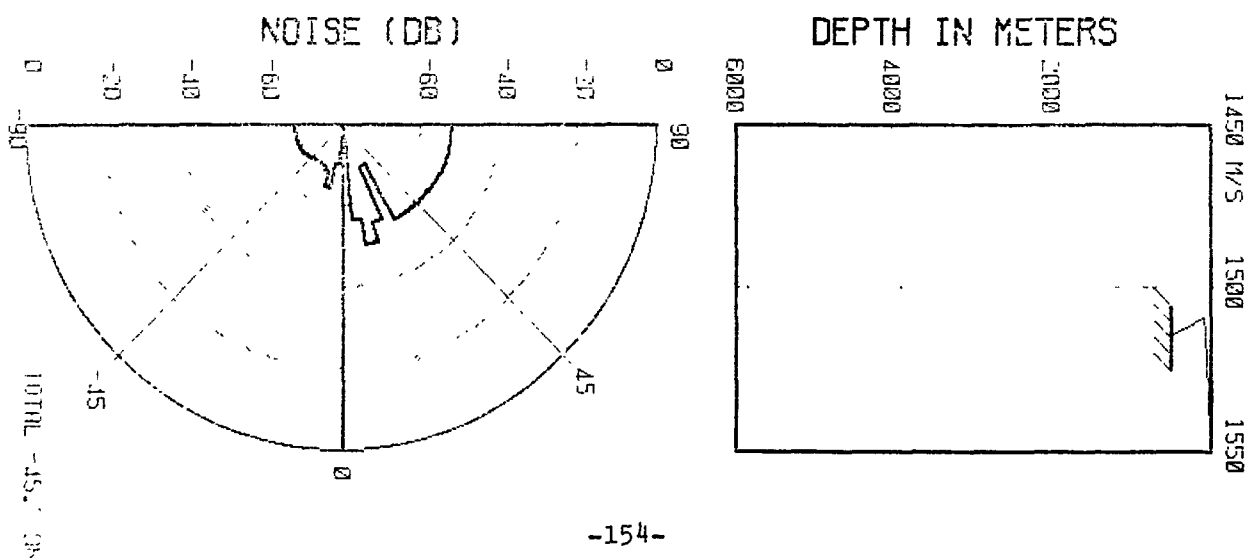
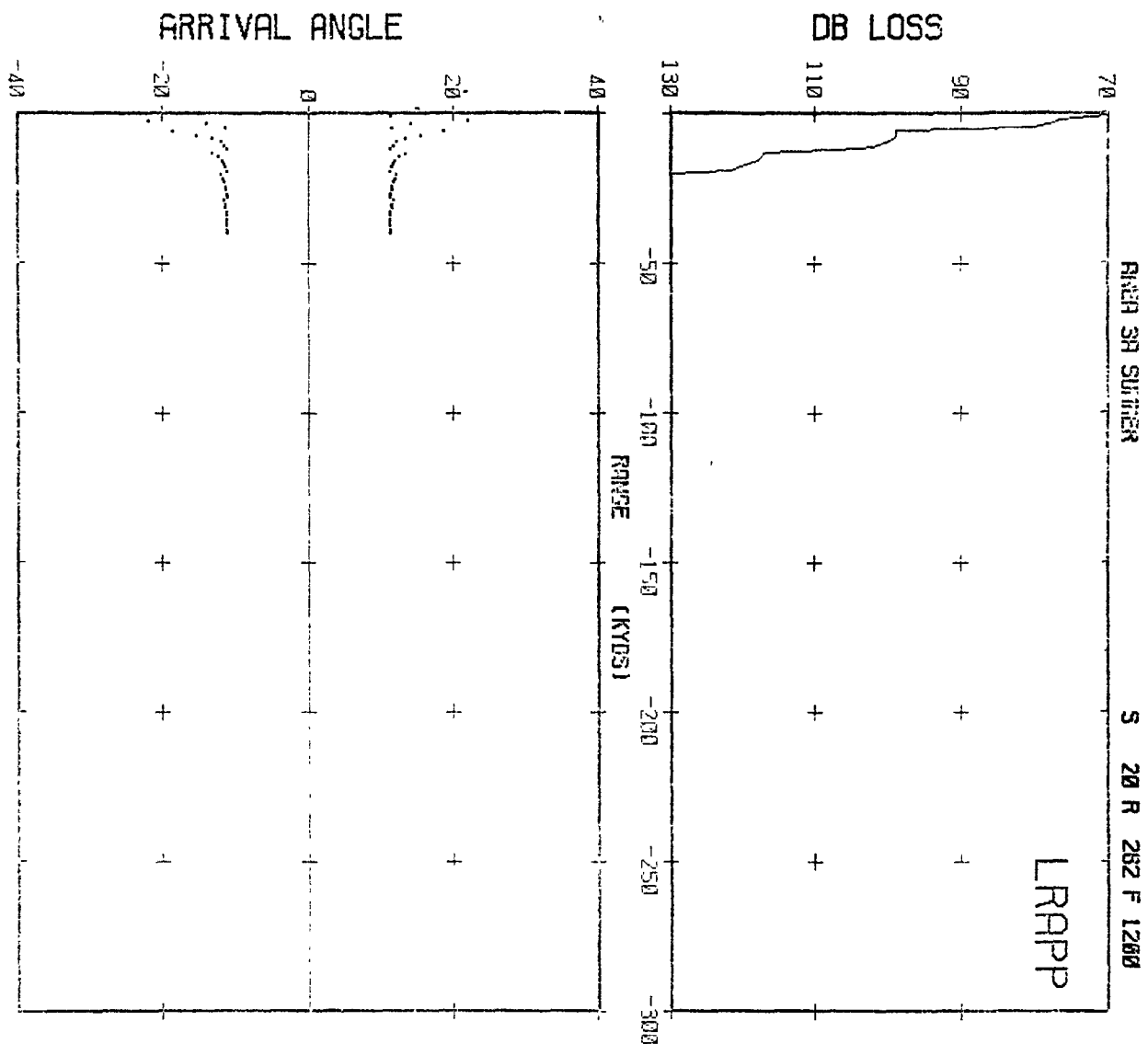


DEPTH IN METERS



NOISE (DB)



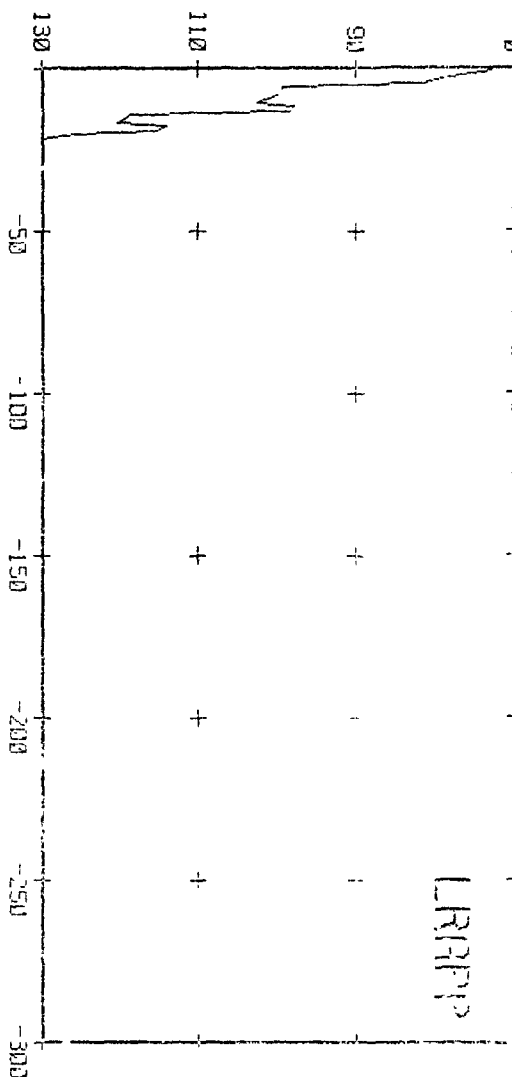


AREA 3A SUBJ: M

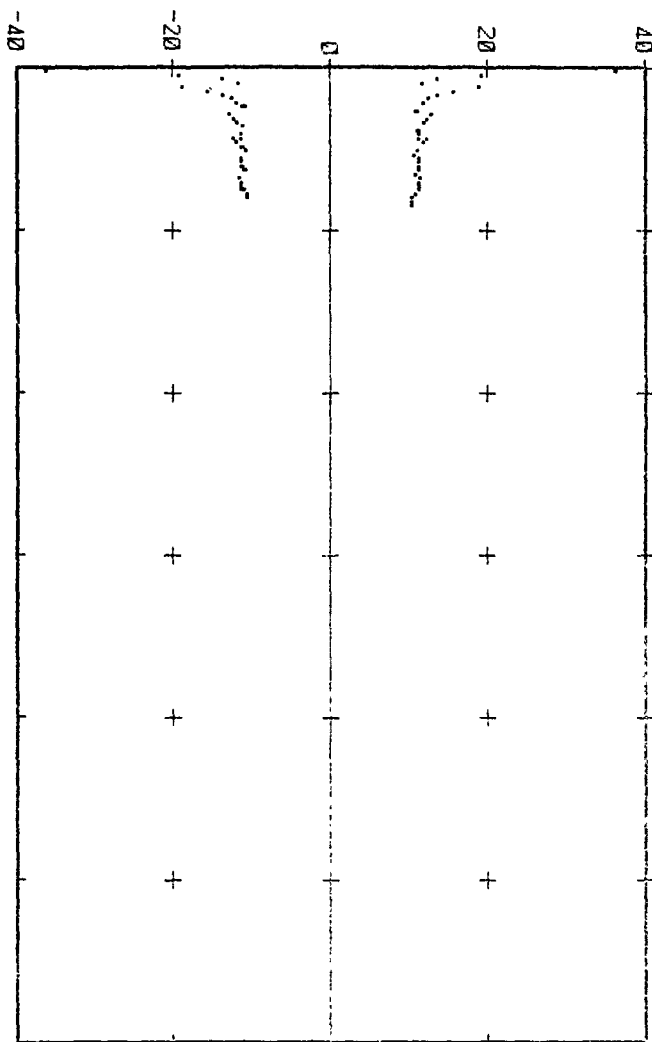
S 59 R 202 F 12-0

1450 M/S 1500 1550

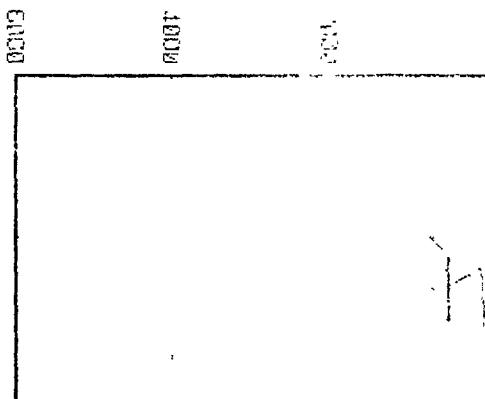
DB LOSS



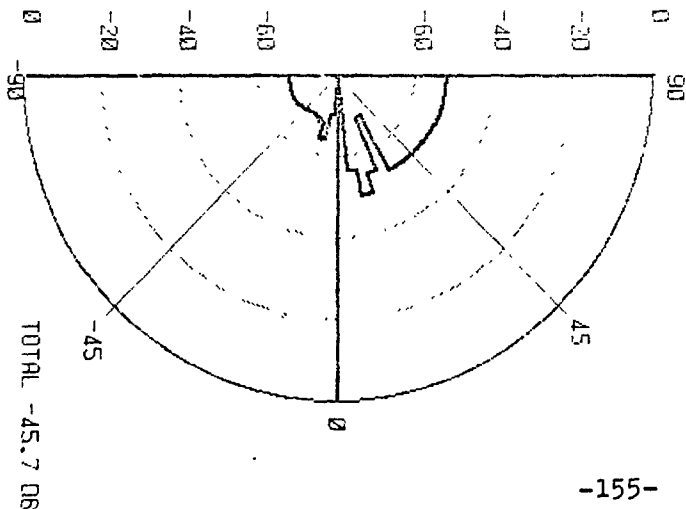
ARRIVAL ANGLE

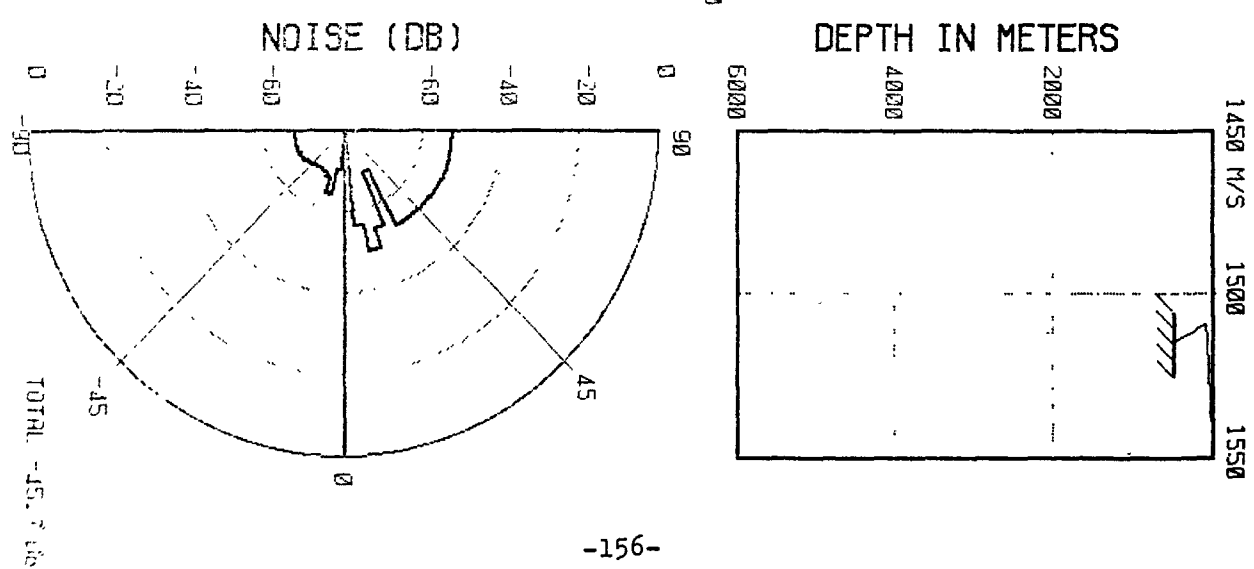
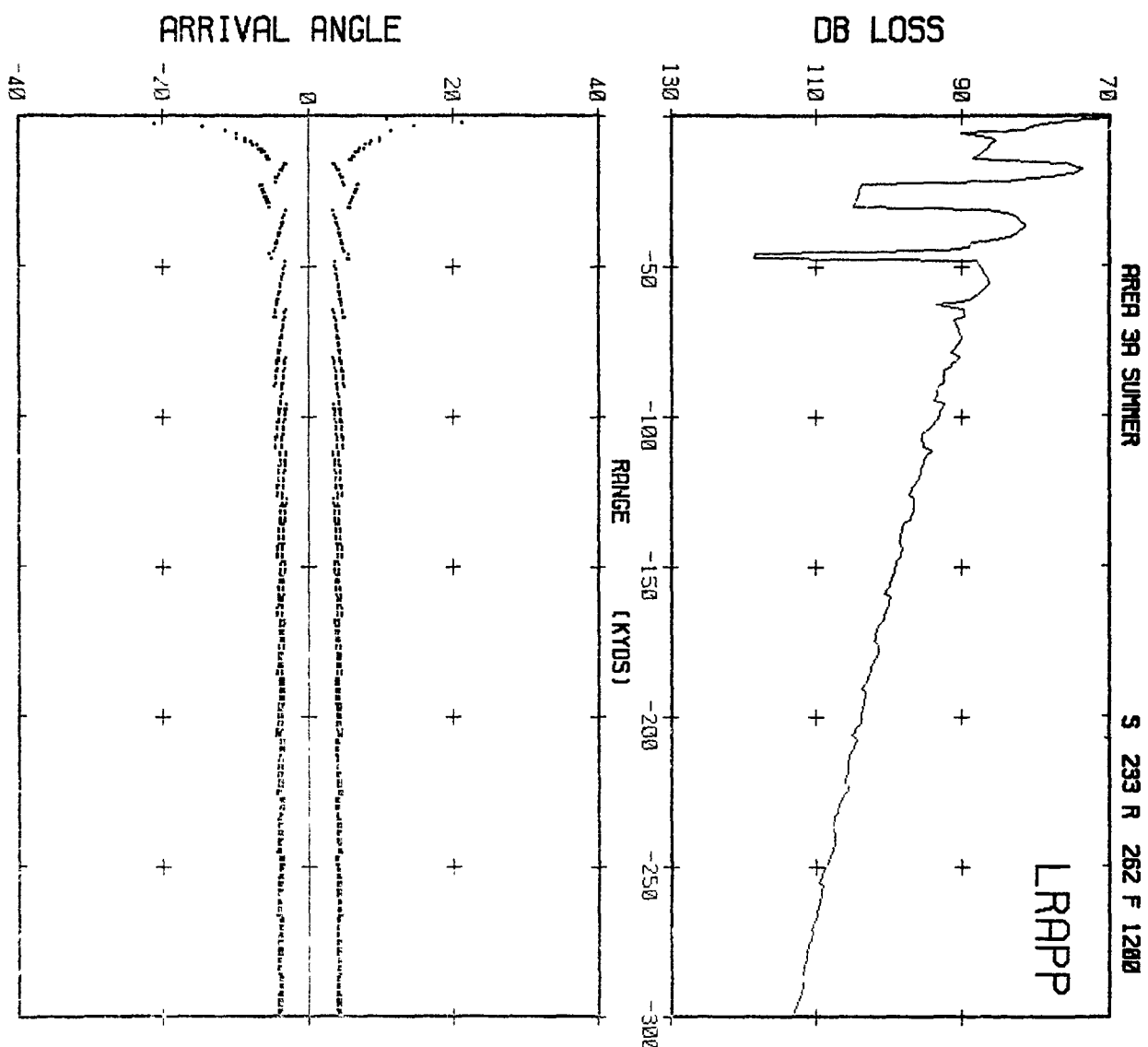


DEPTH IN METERS



NOISE (DB)



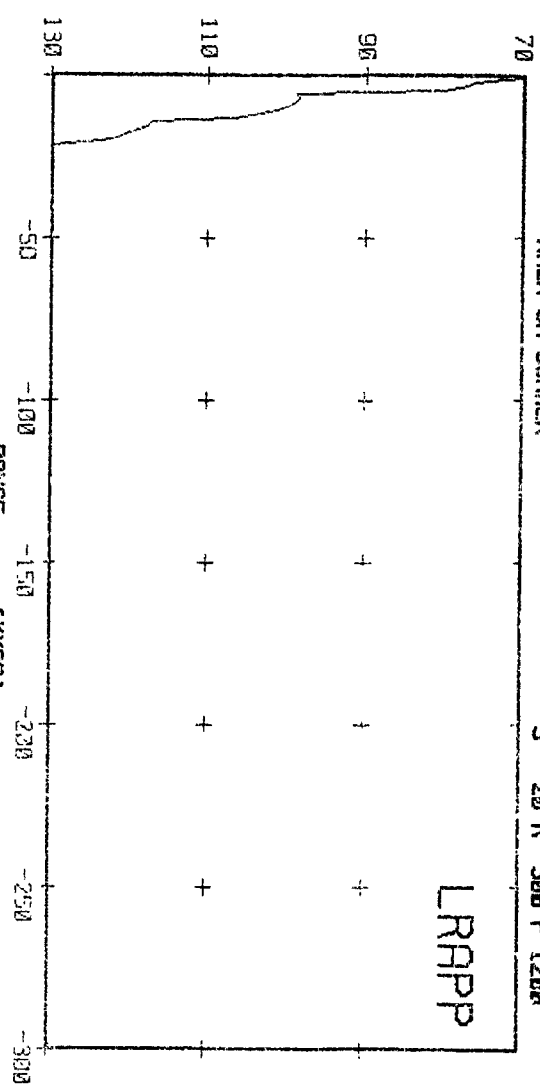


AREA 3A SUMMER

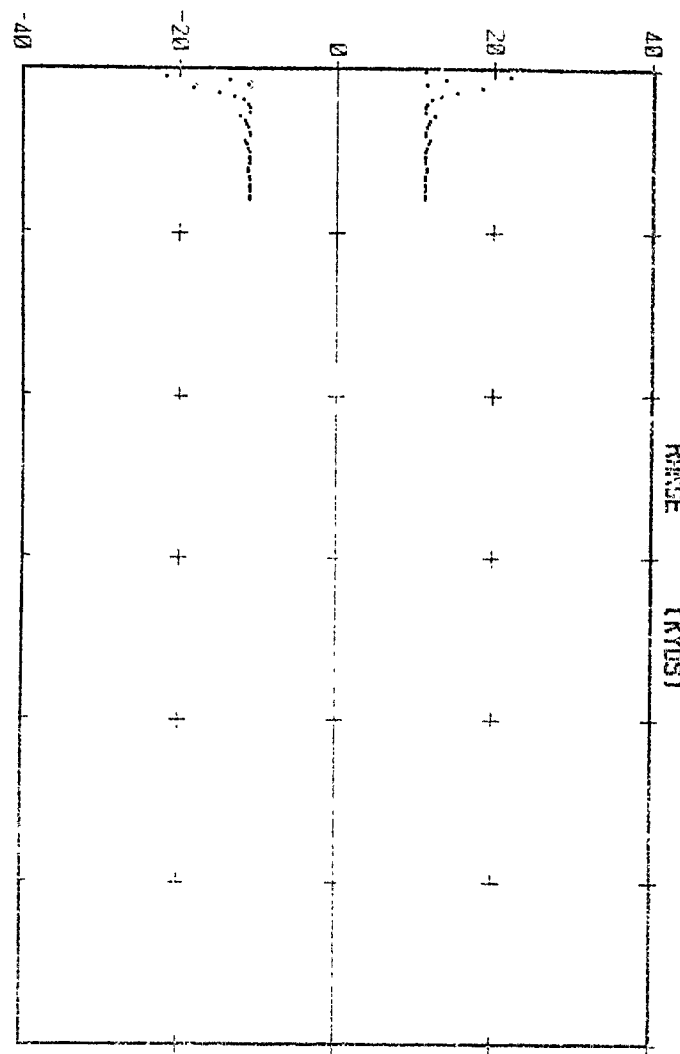
S 20 R 300 F 1200

1450-N/S 1500 1550

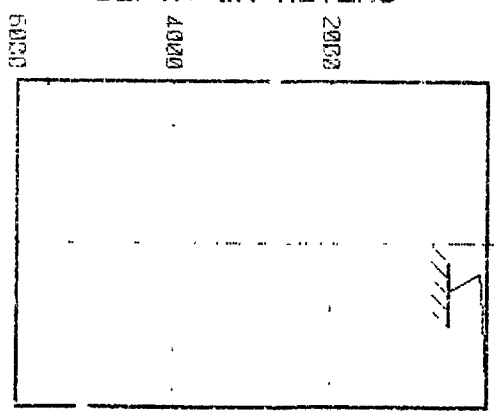
DB LOSS



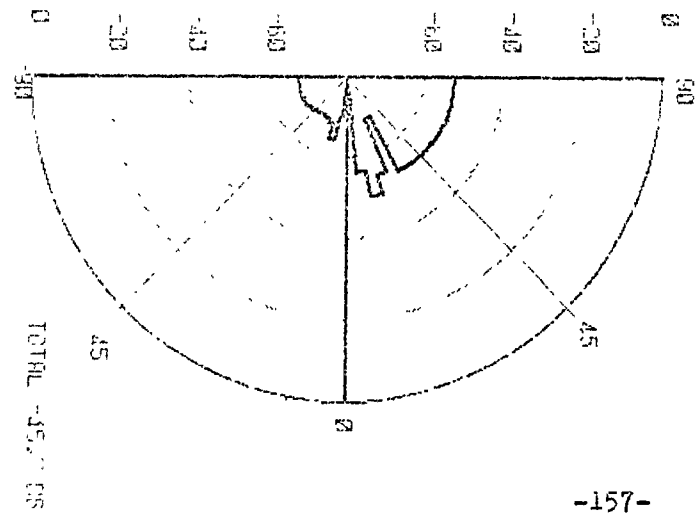
ARRIVAL ANGLE

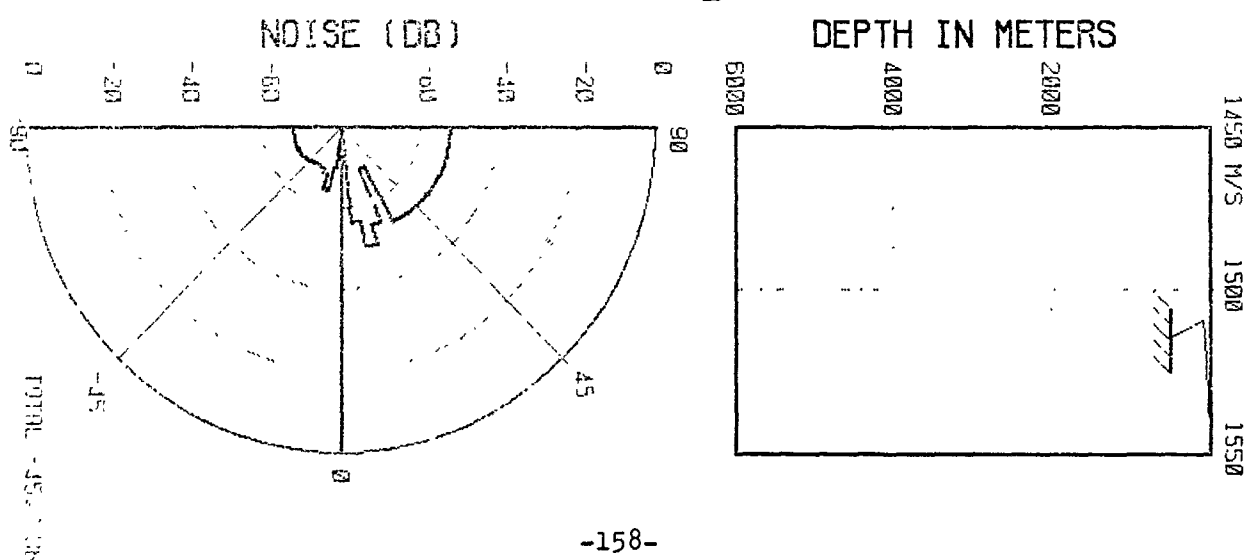
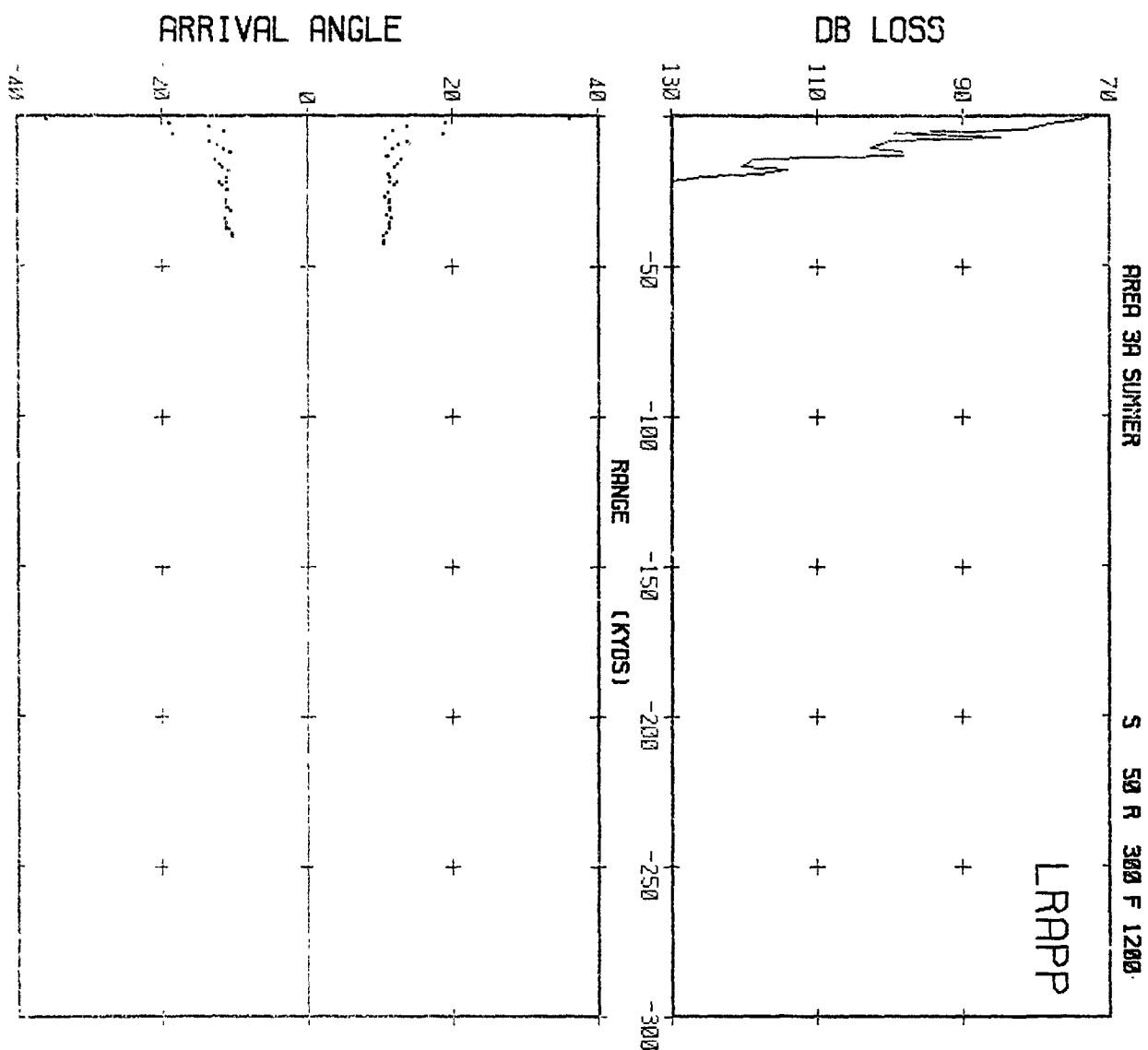


DEPTH IN METERS



NOISE (DB)

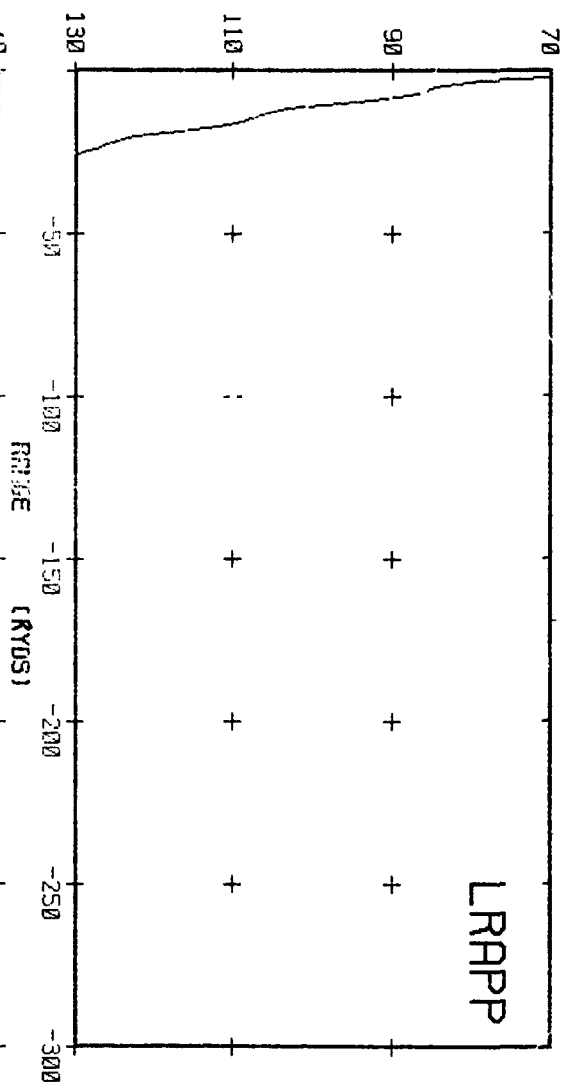




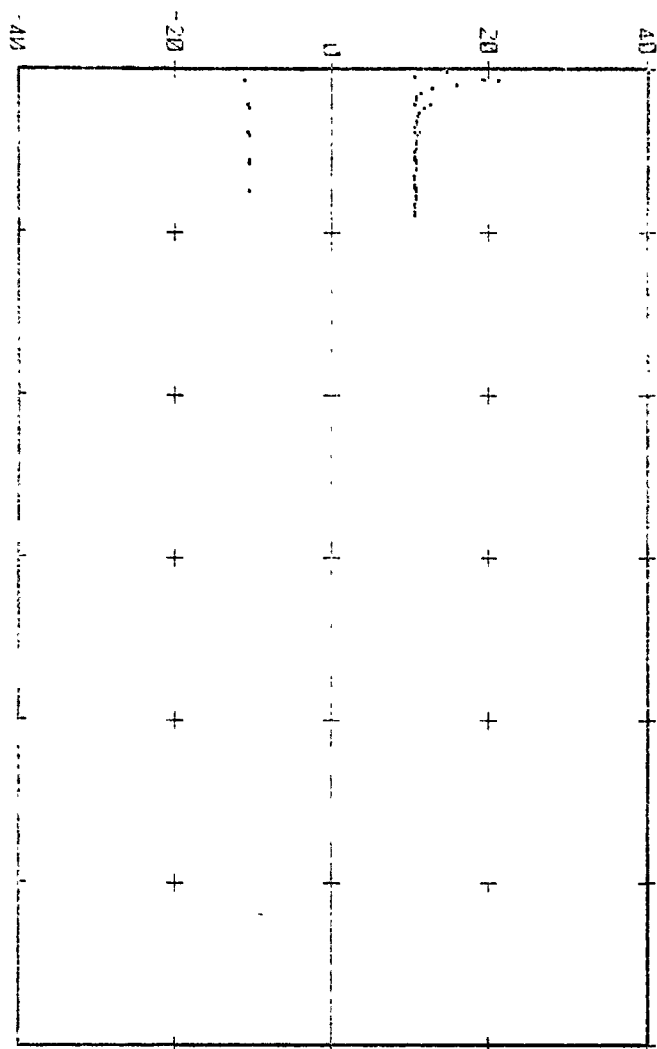
AREA 3A SUMNER

S 20 R 1000 F 1200

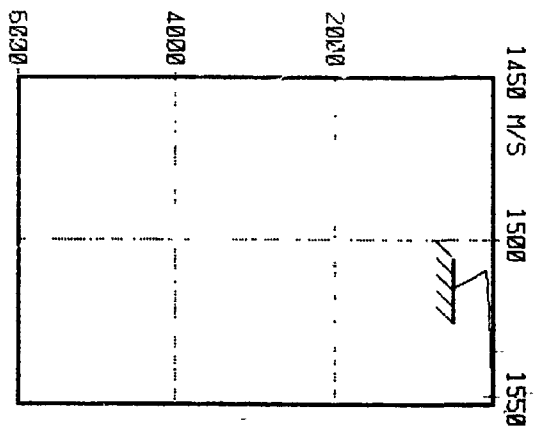
DB LOSS



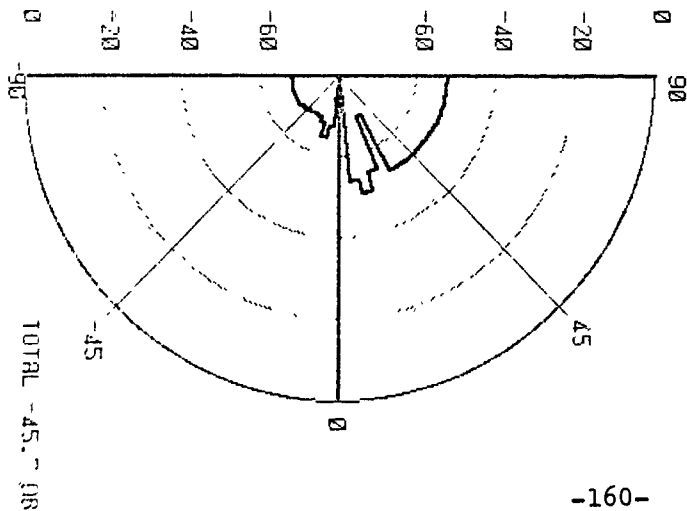
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

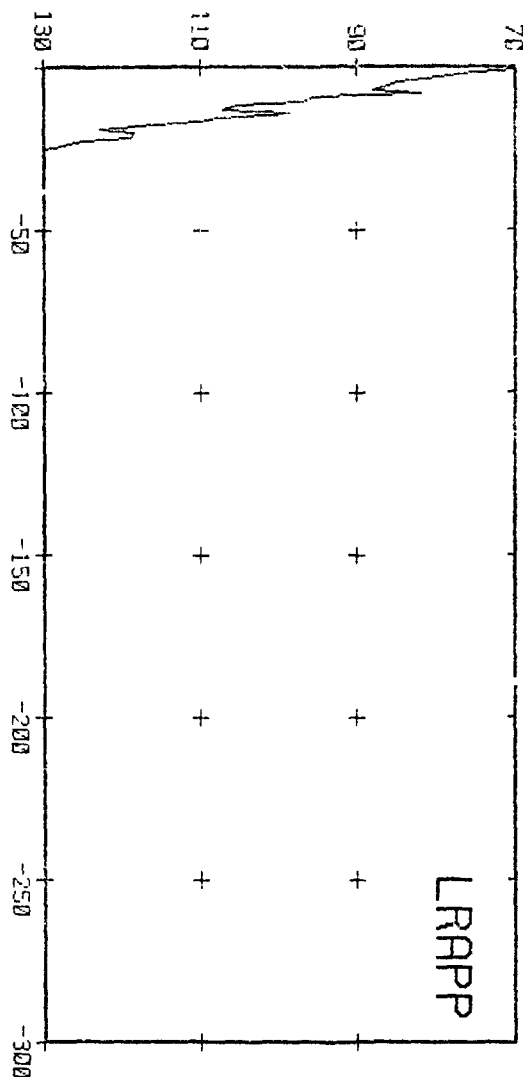


PRER 3R SUMMER

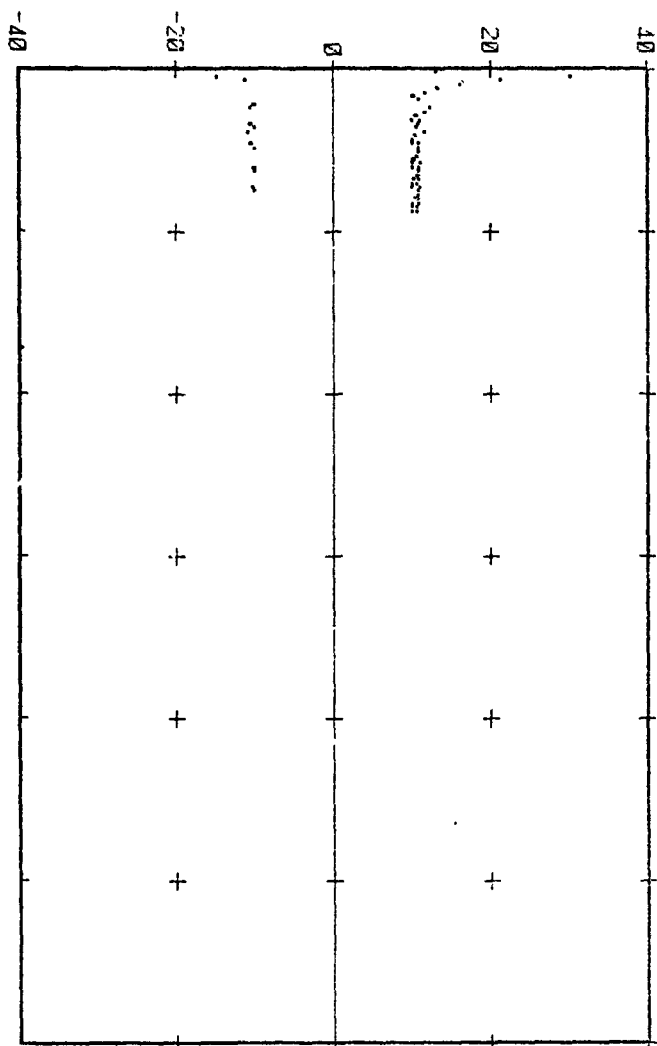
S 50 R 1000 F 1200

1450 M/S 1500 1550

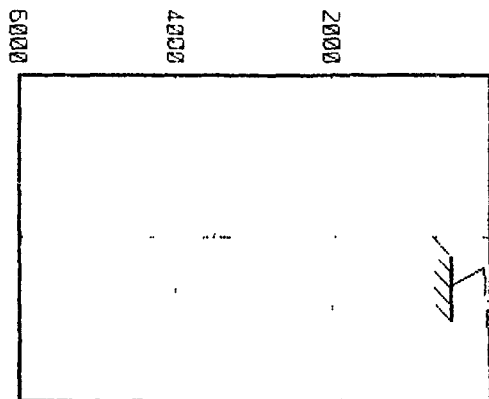
DB LOSS



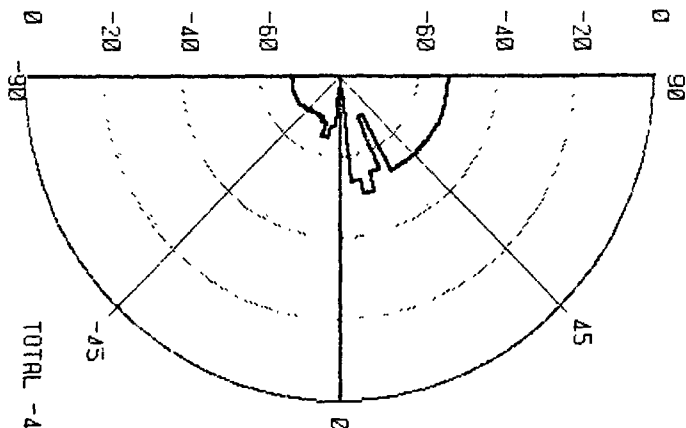
ARRIVAL ANGLE



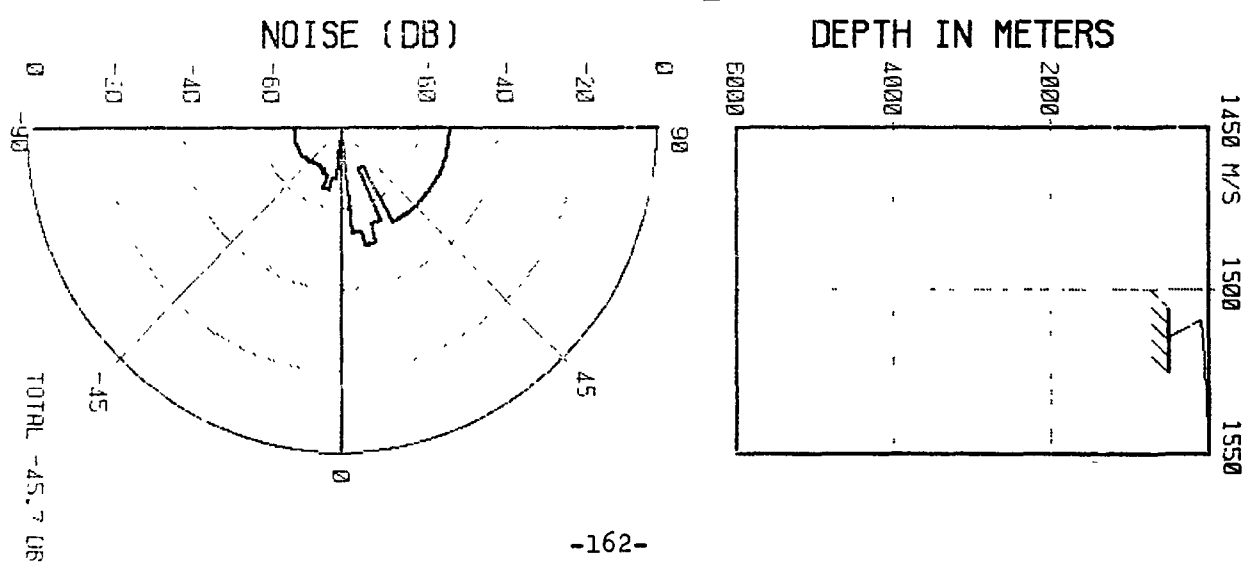
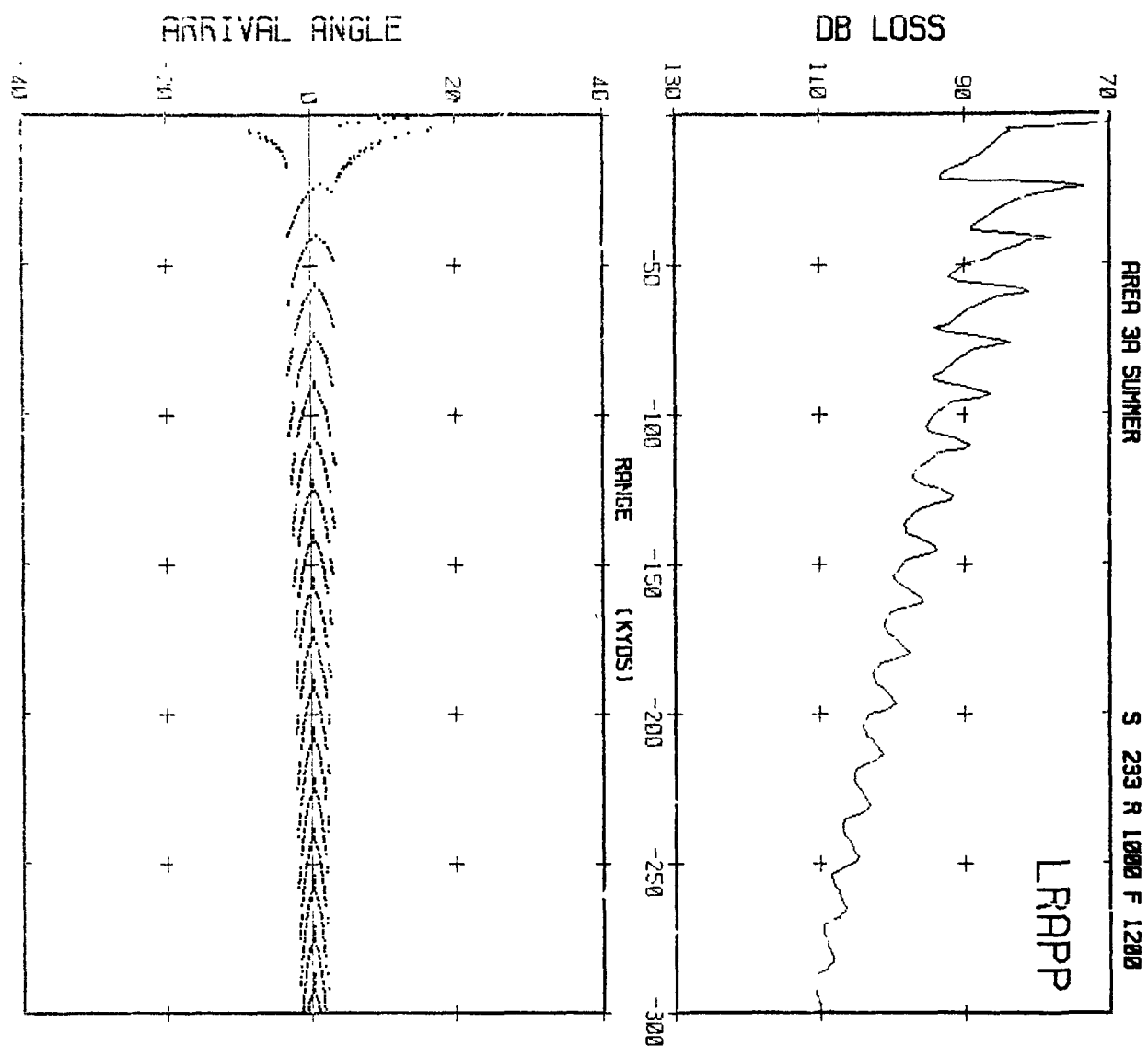
DEPTH IN METERS



NOISE (DB)

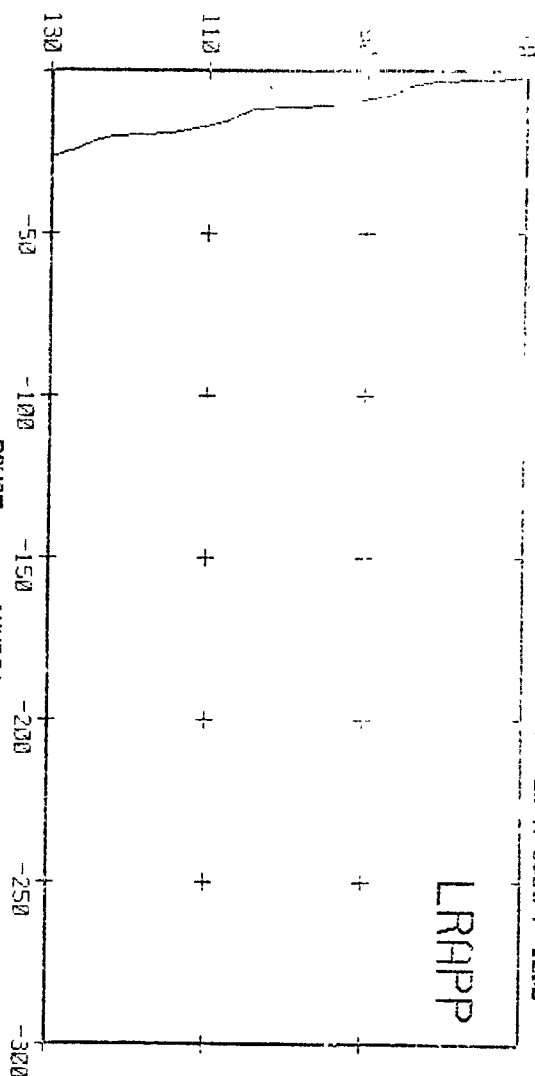


TOTAL -45.7 DB

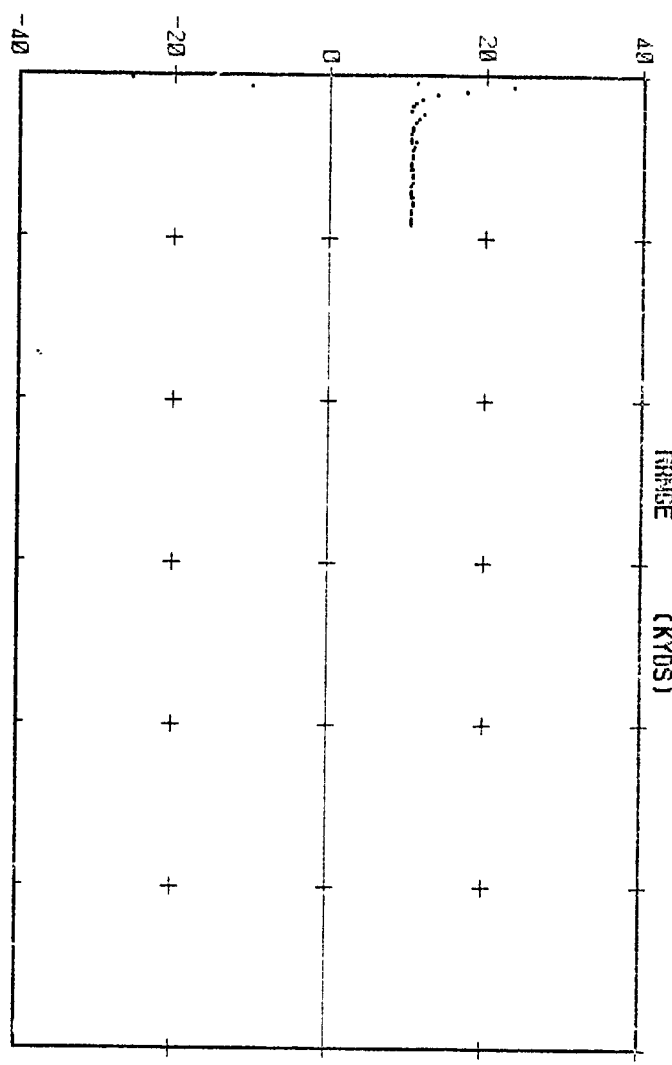


1450 11/5 1500 1550

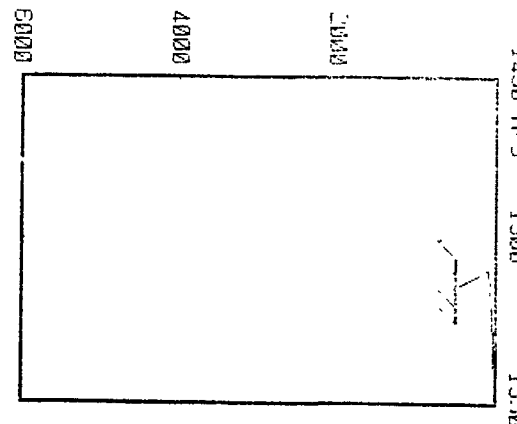
DB LOSS



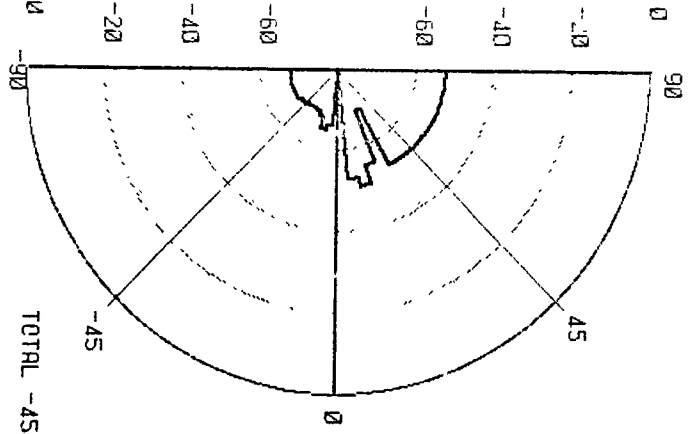
ARRIVAL ANGLE



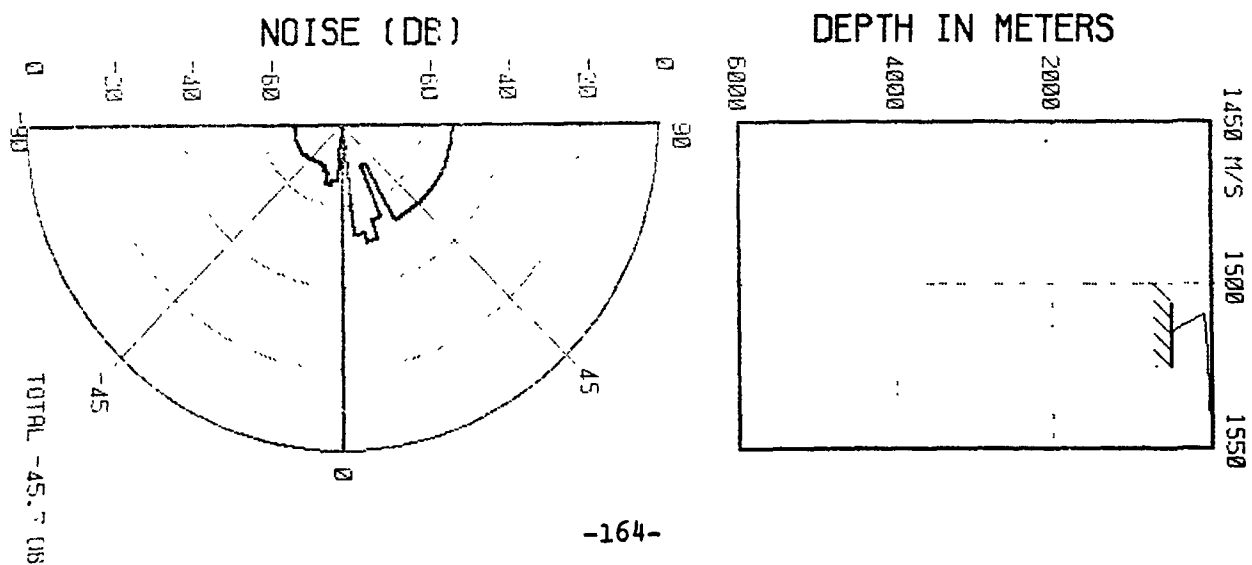
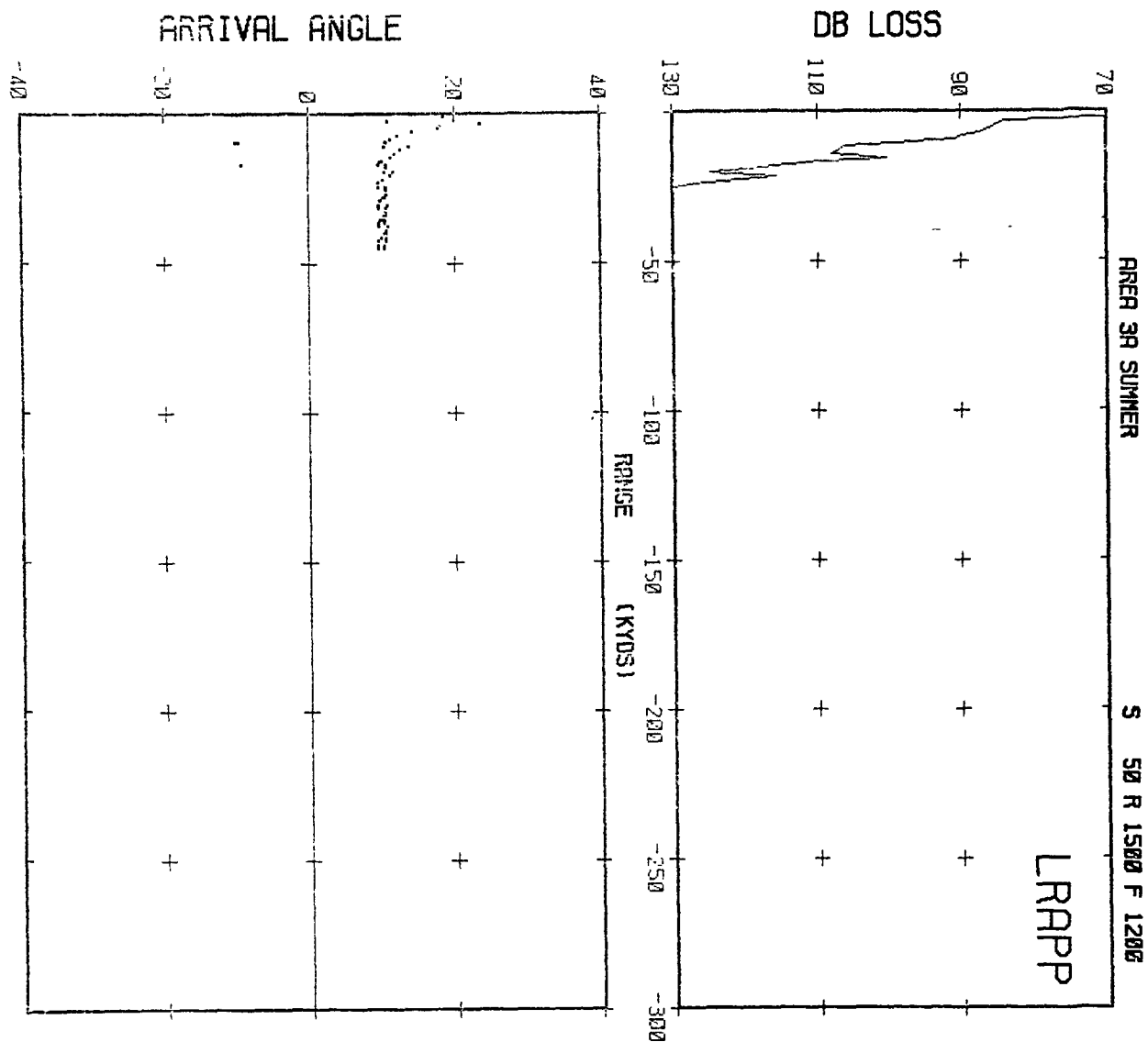
DEPTH IN METERS

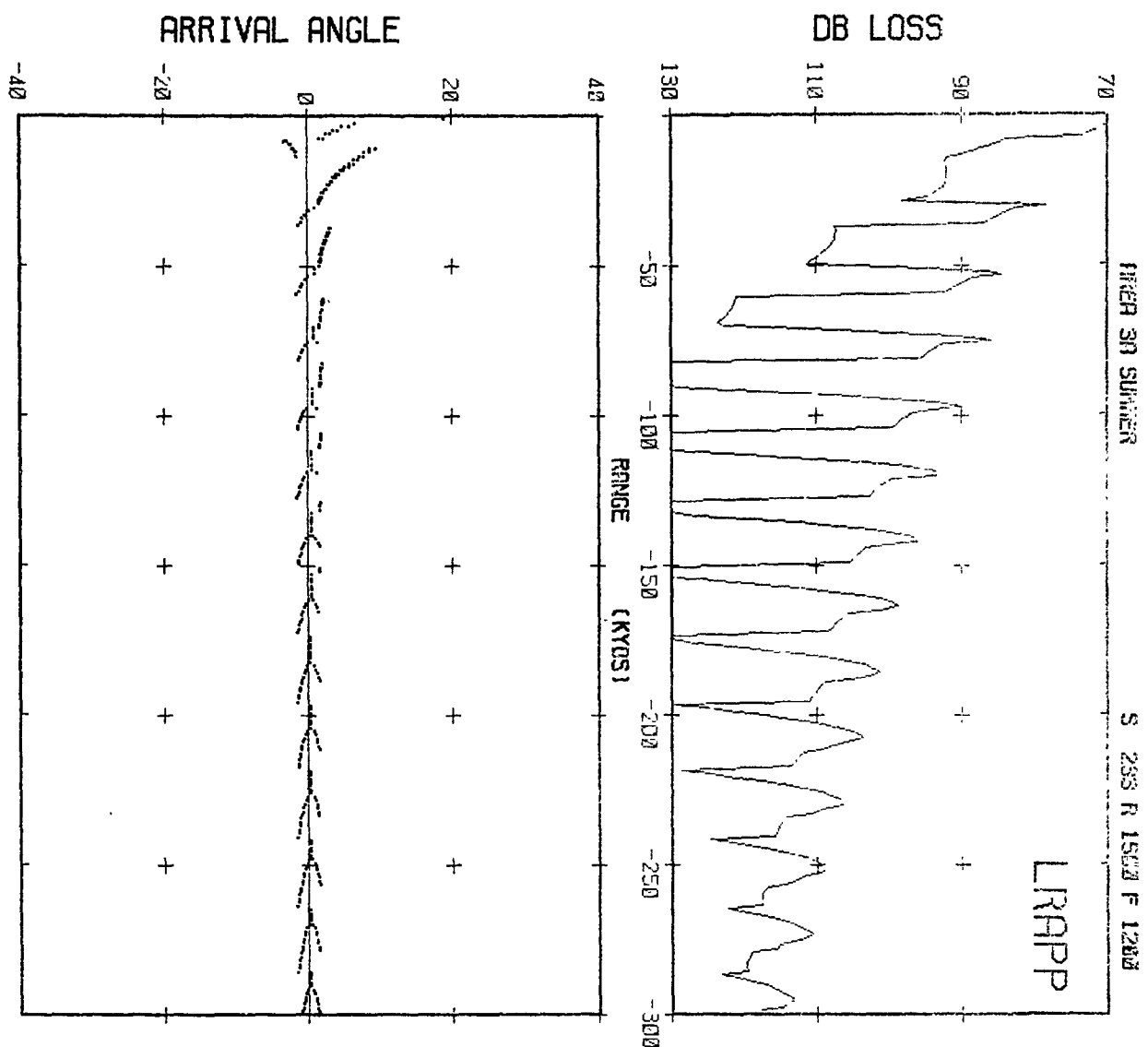


NOISE (DB)



TOTAL -45.7 DB

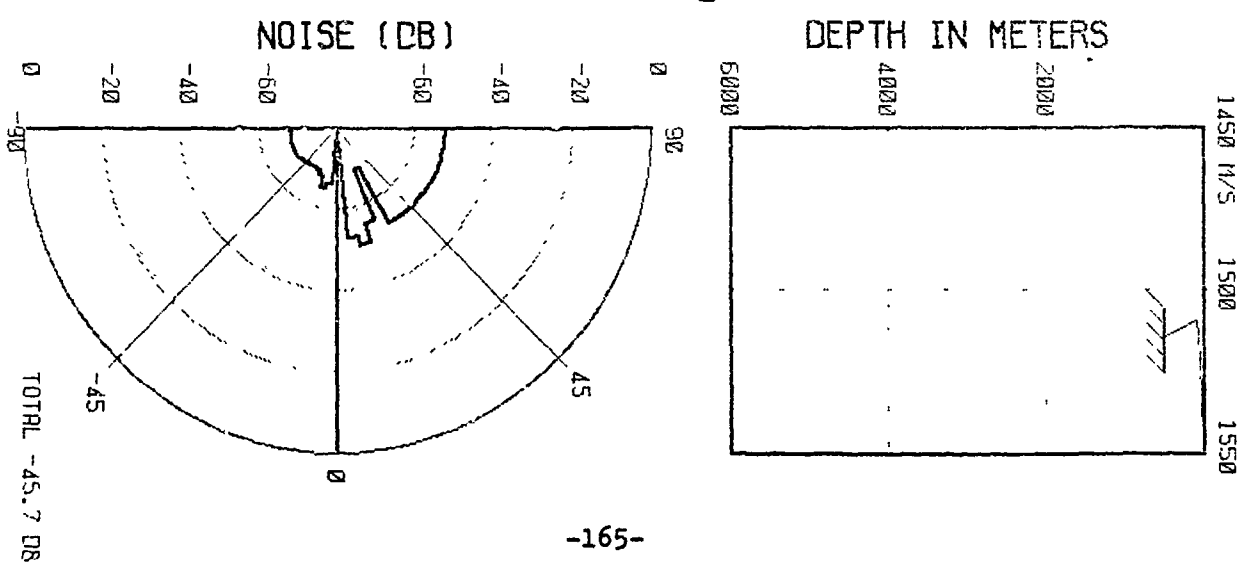


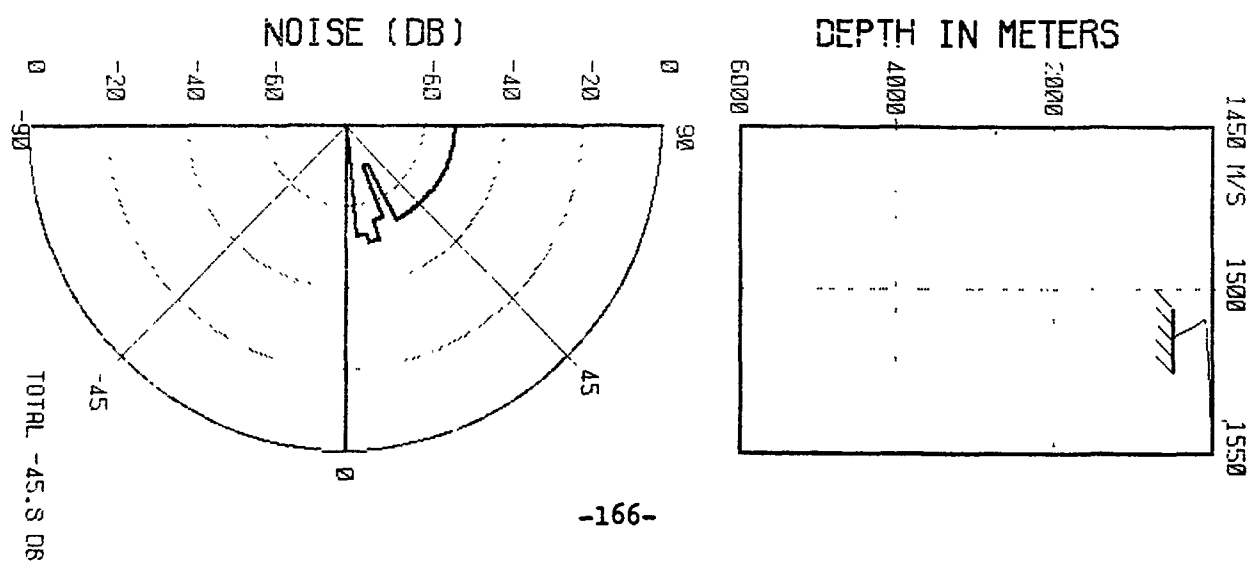
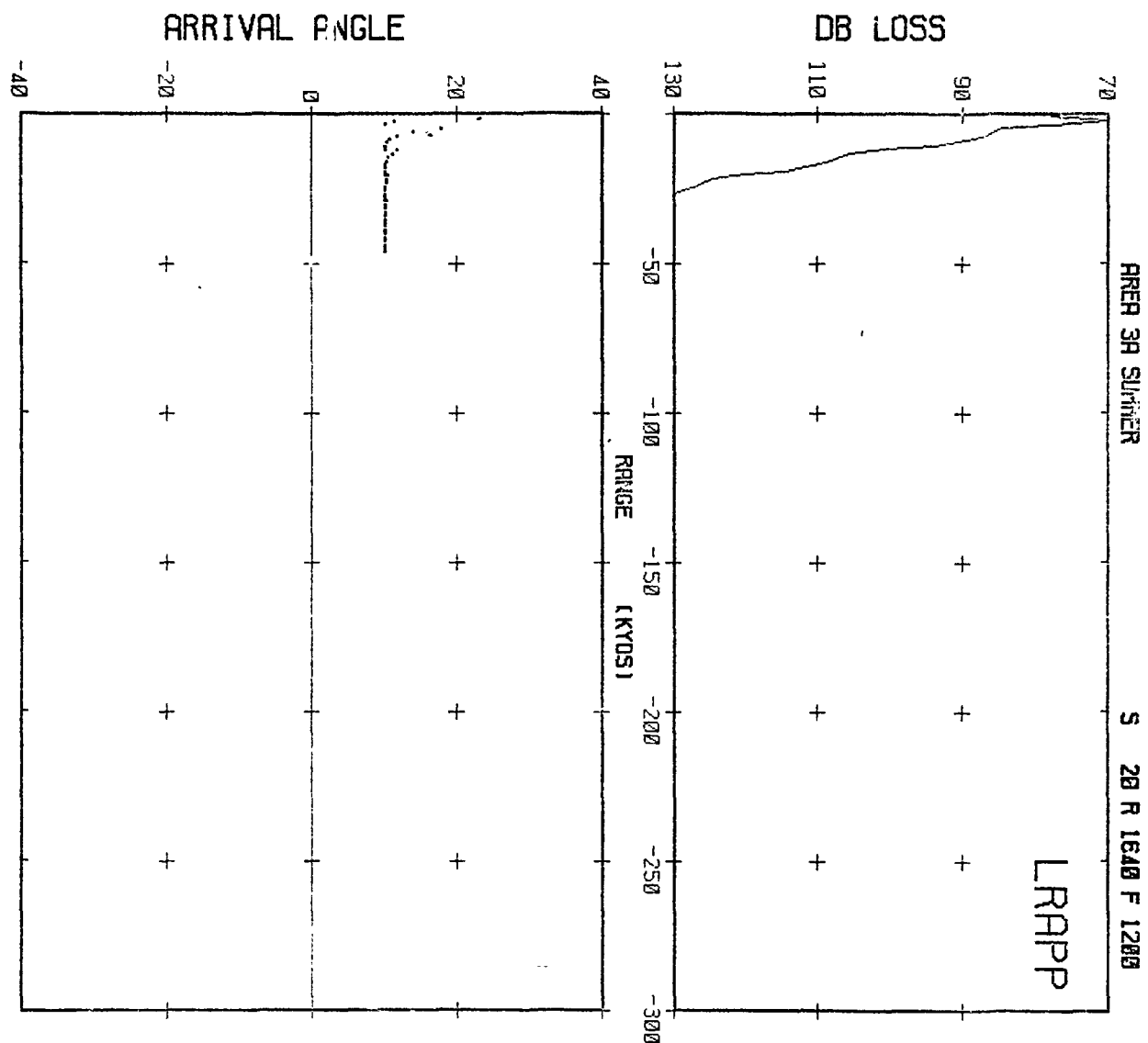


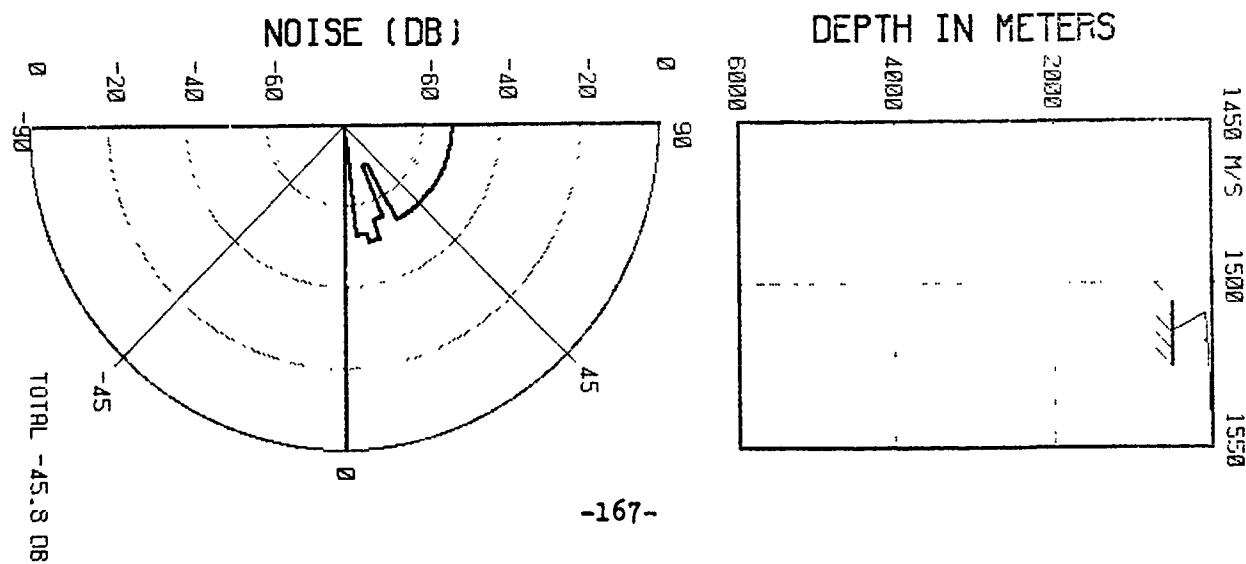
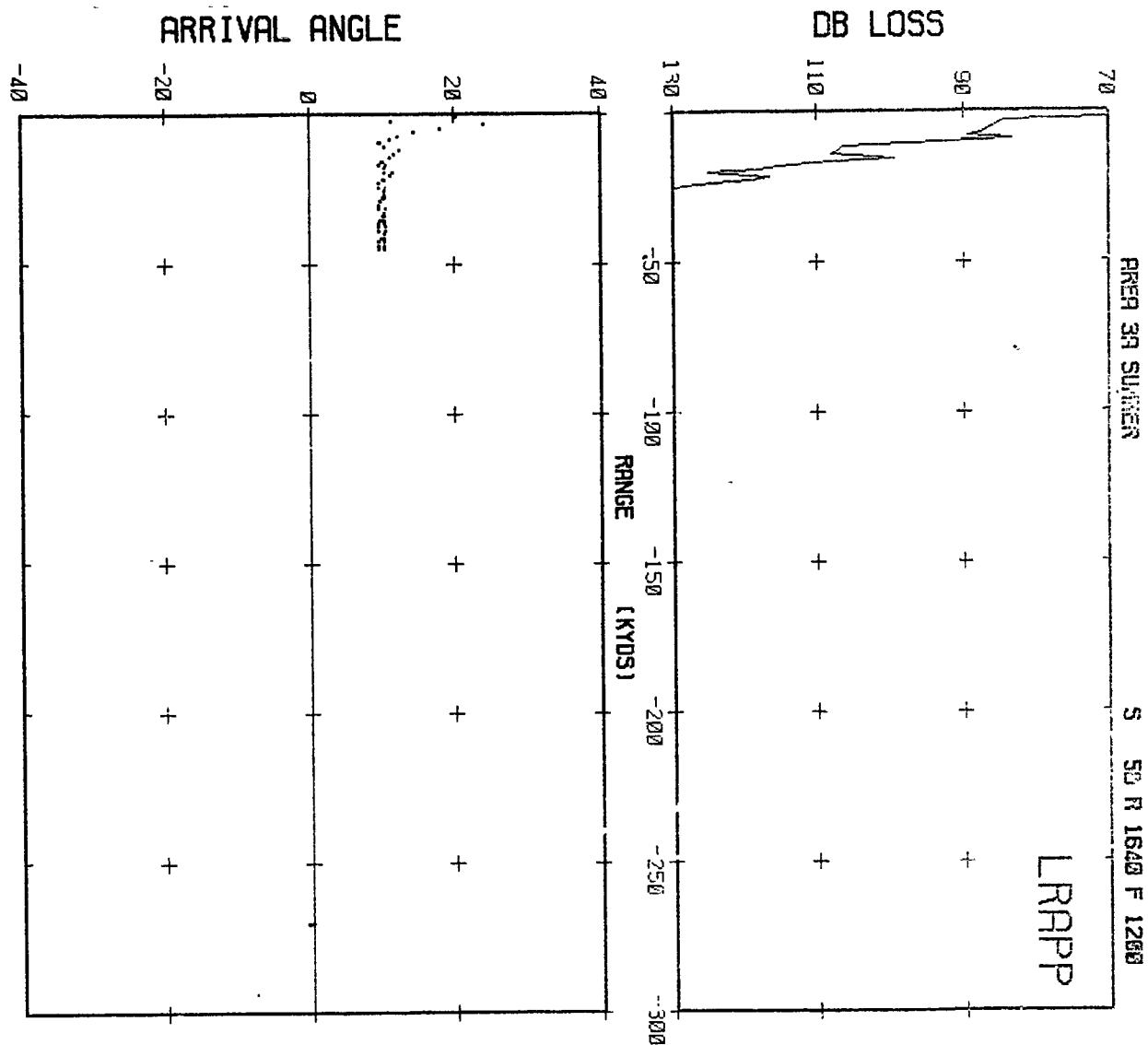
PIPER 30 SUMMER

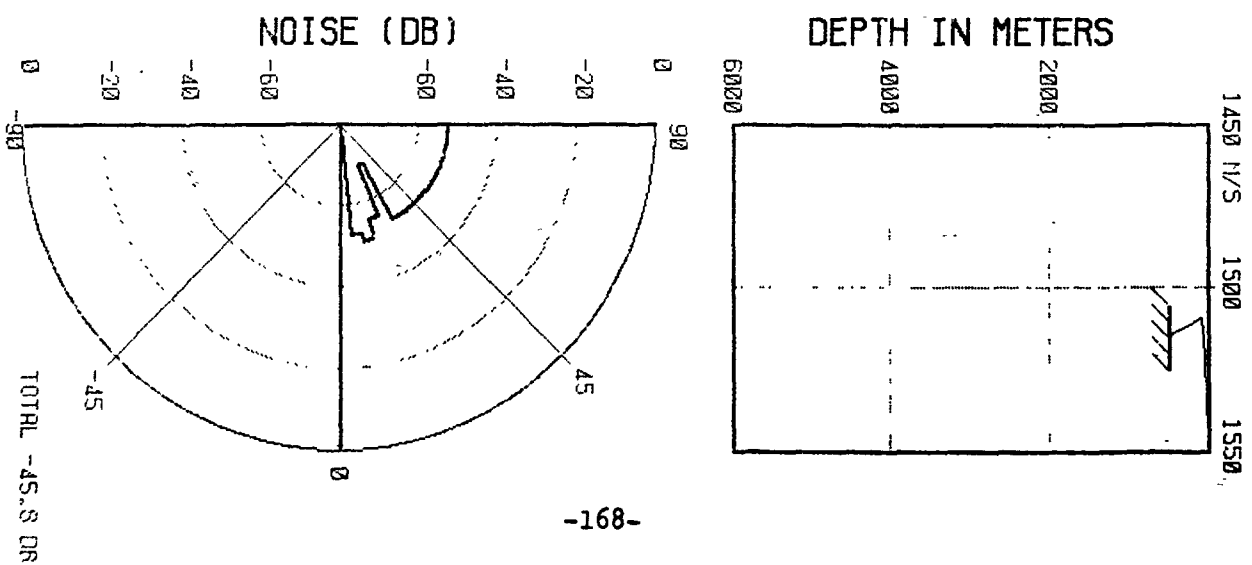
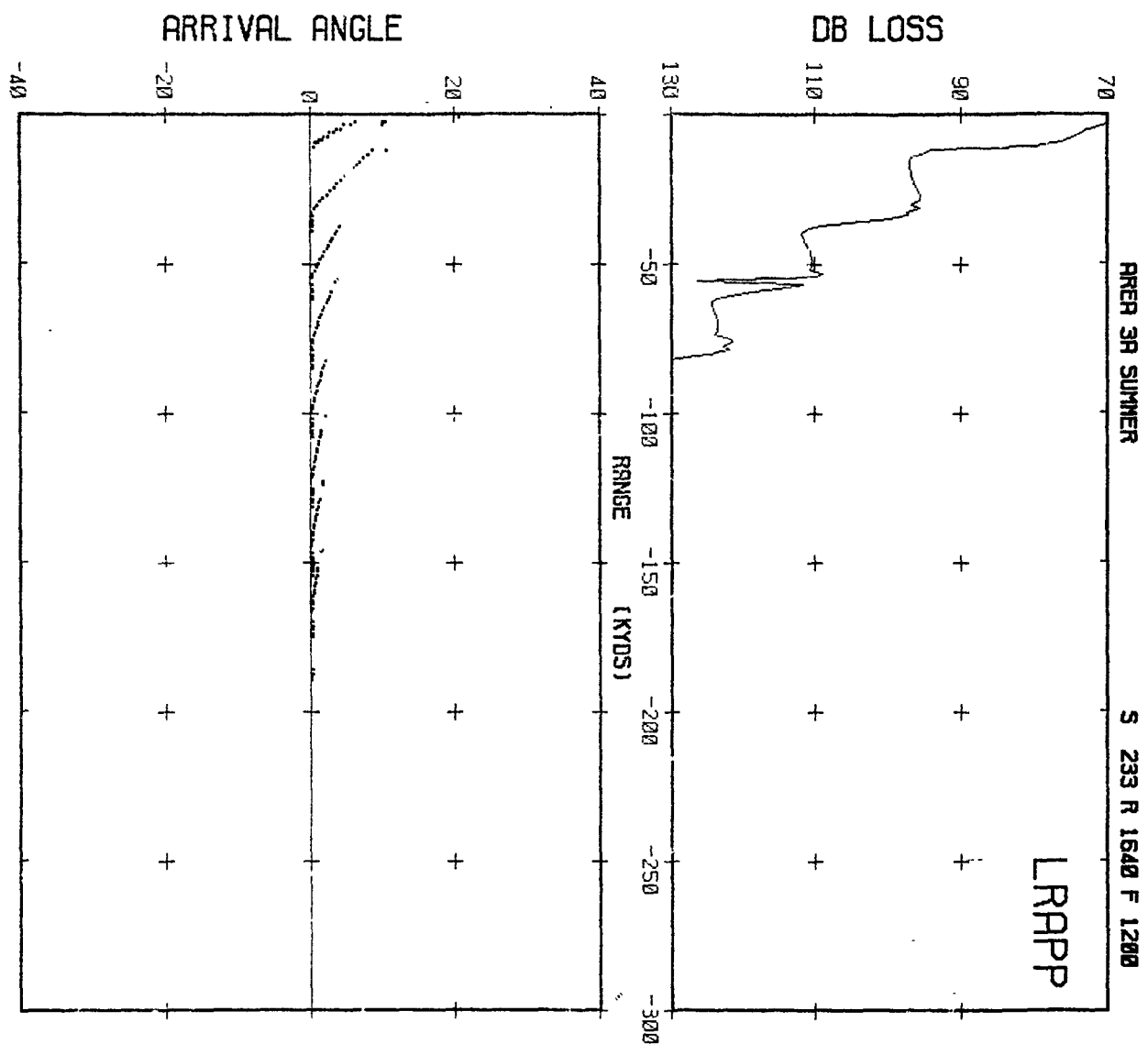
S 233 R 1500 F 1200

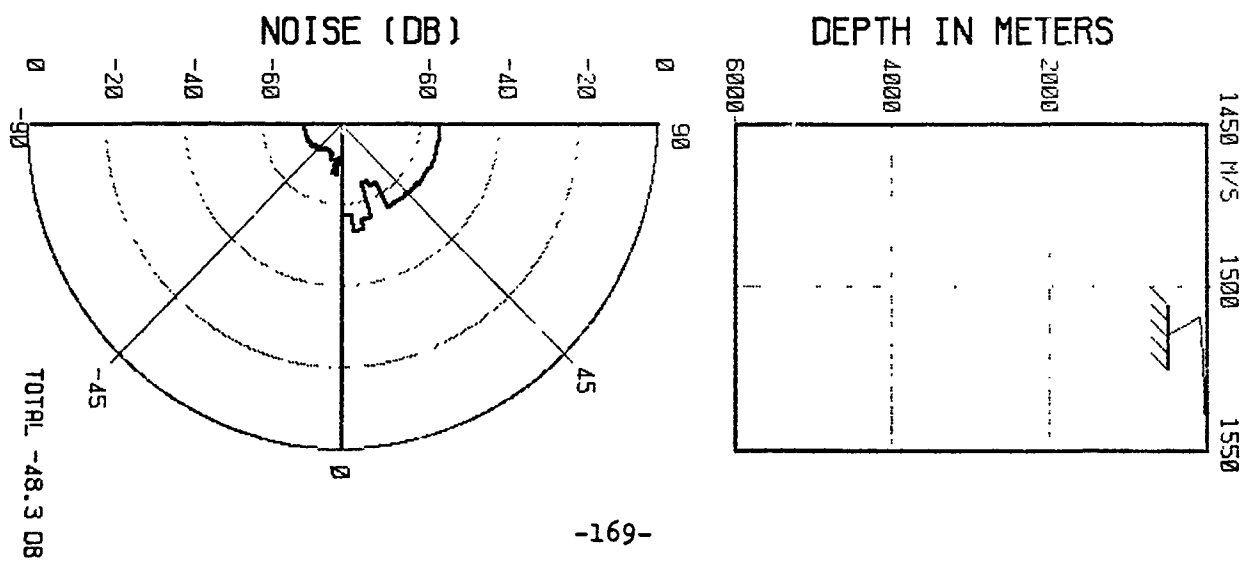
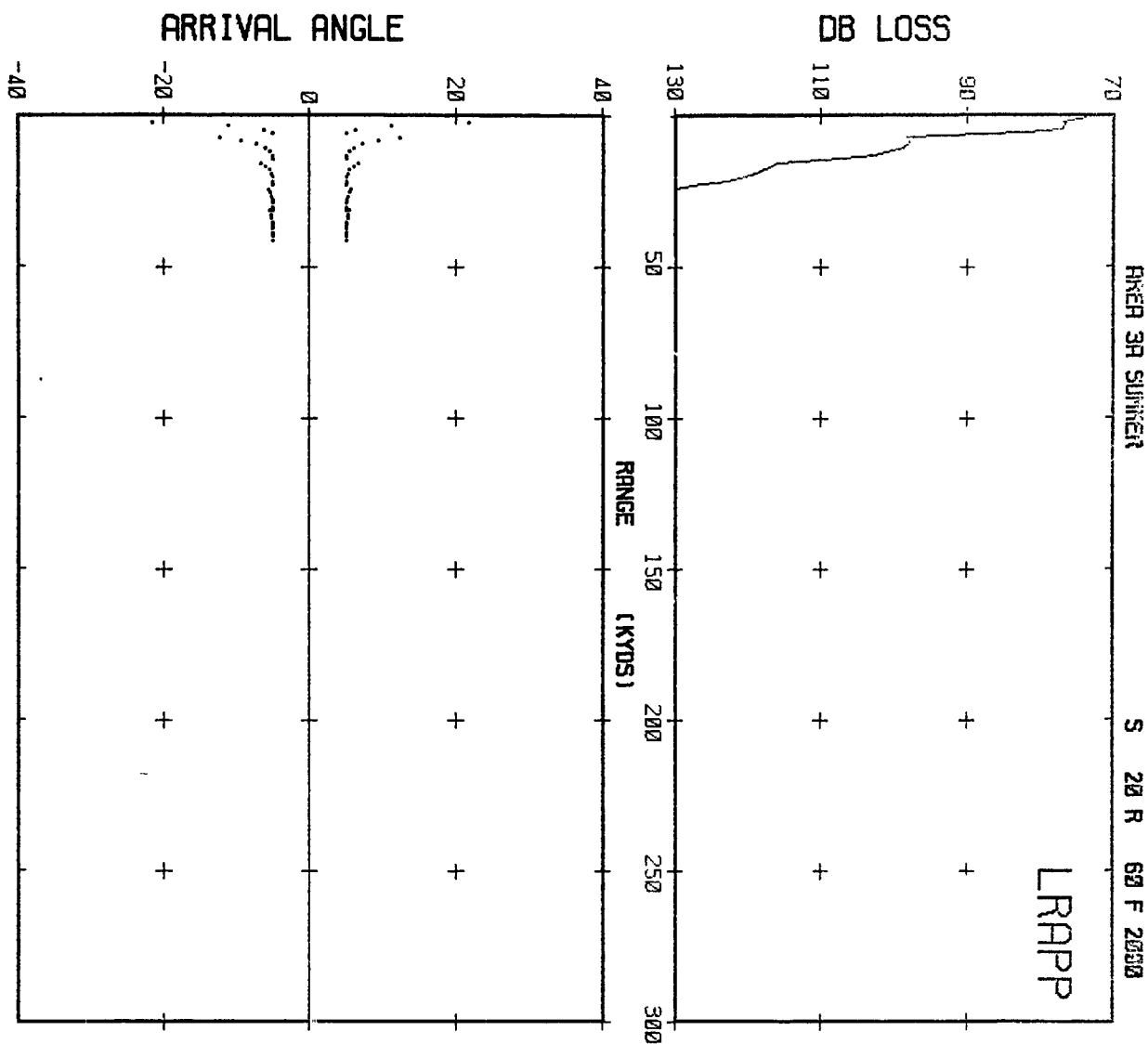
LRAPP

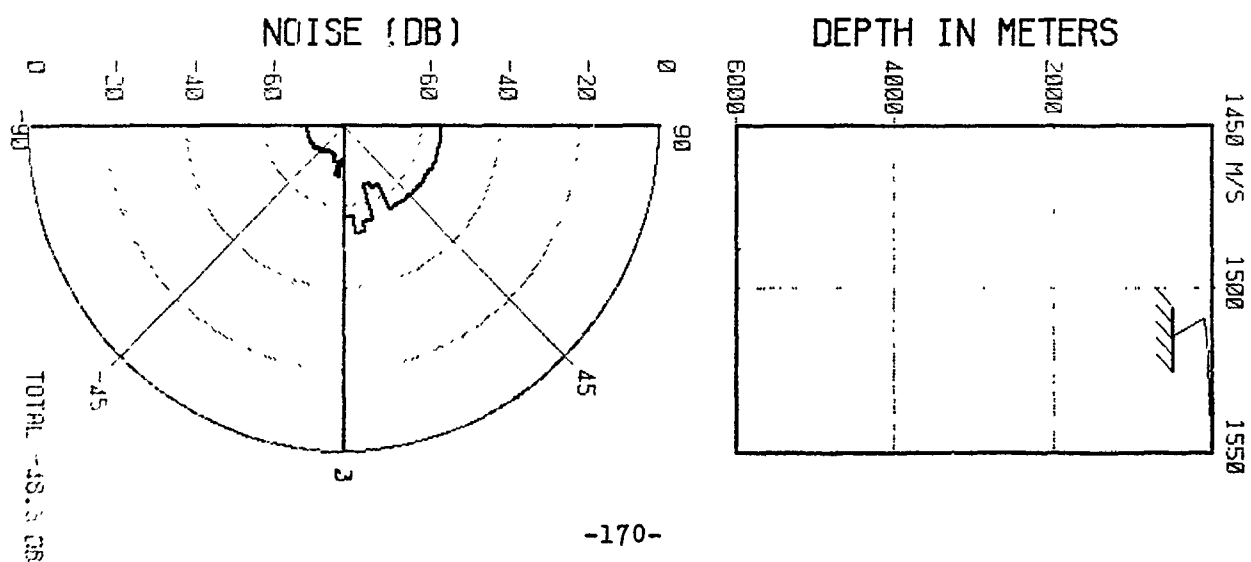
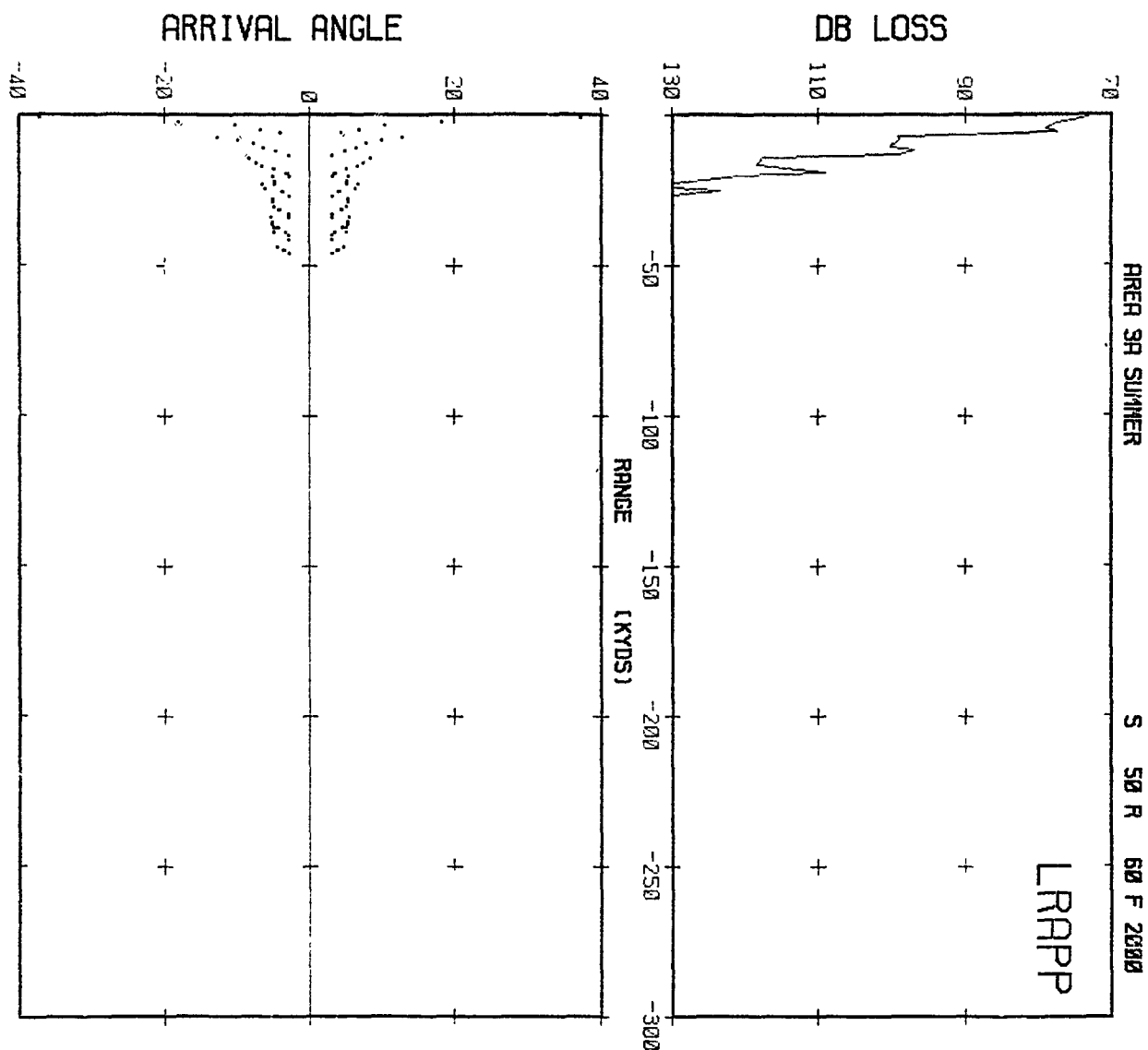


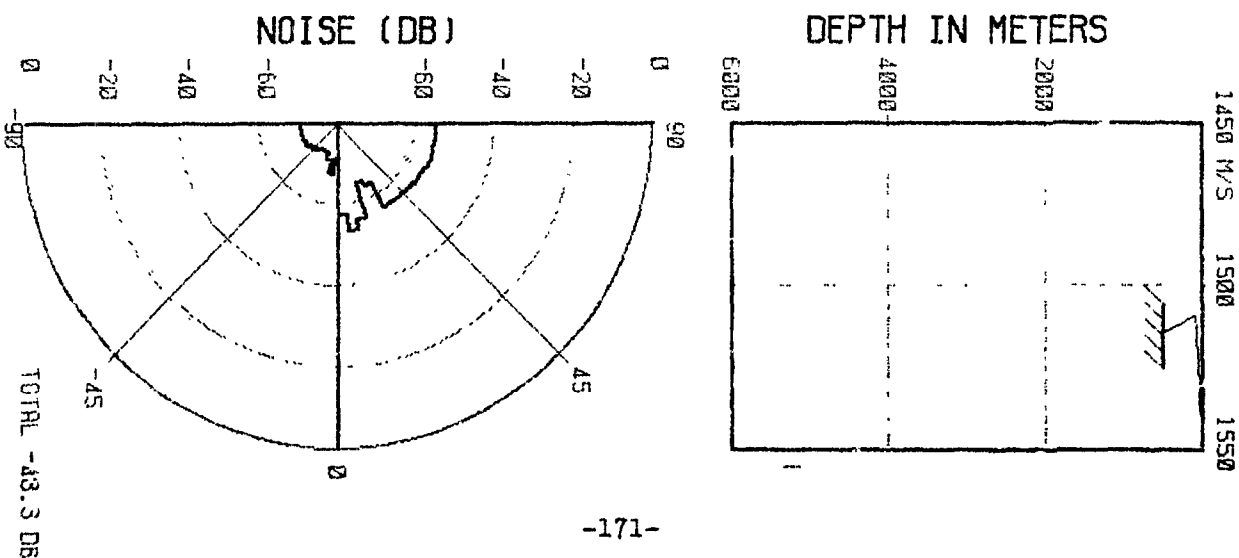
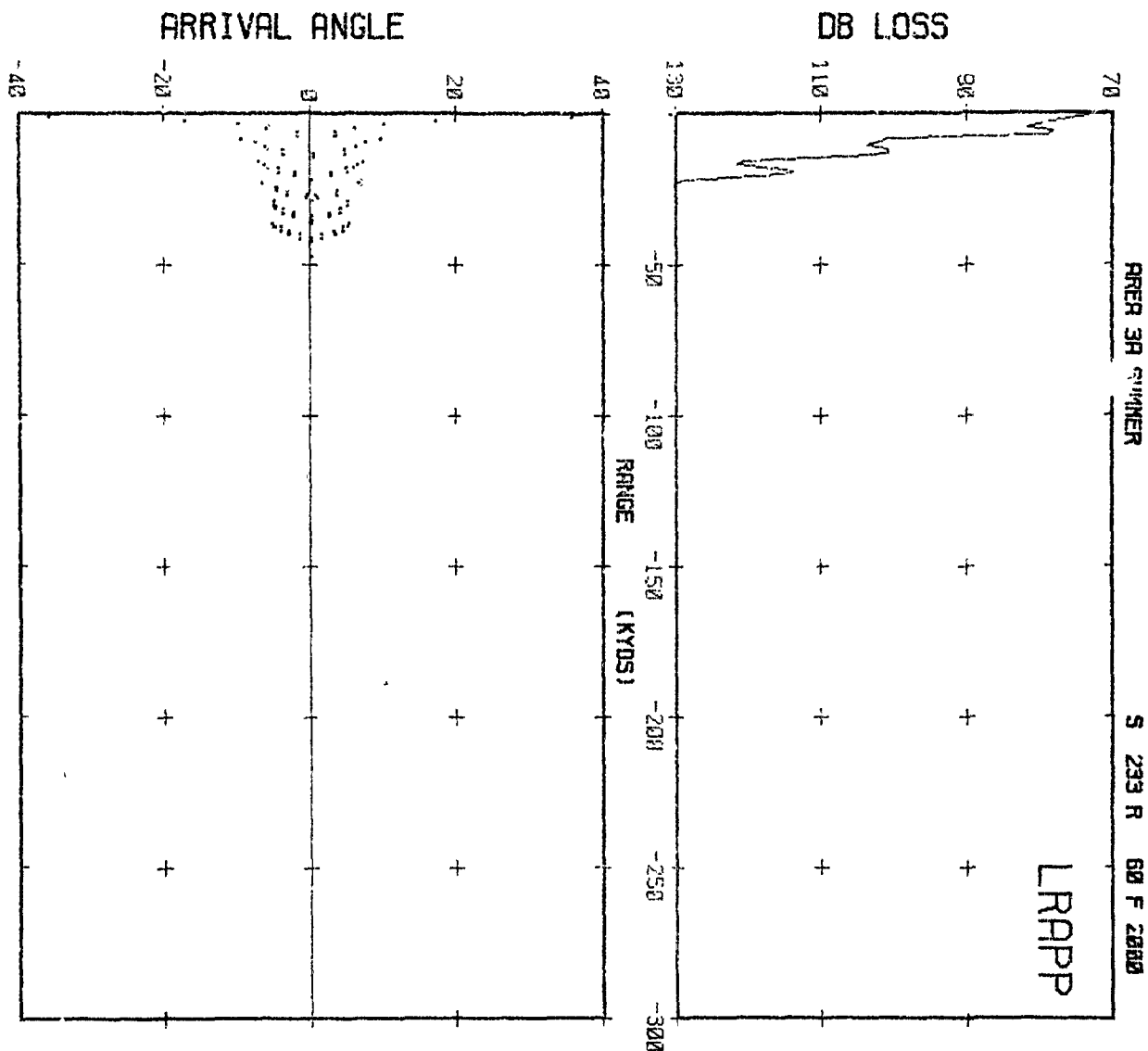


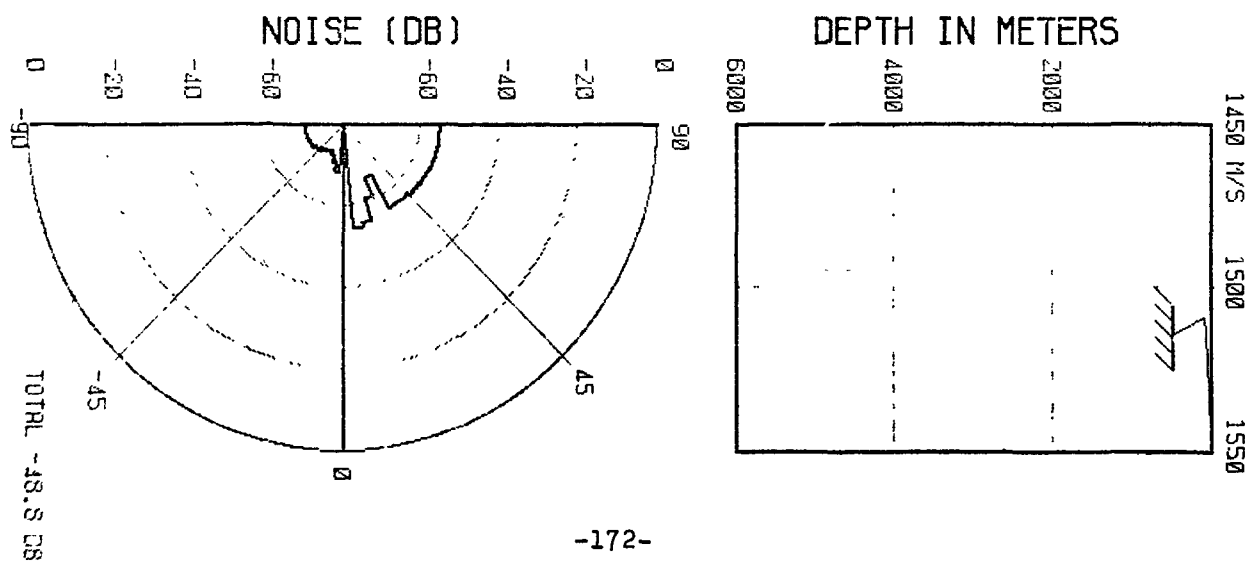
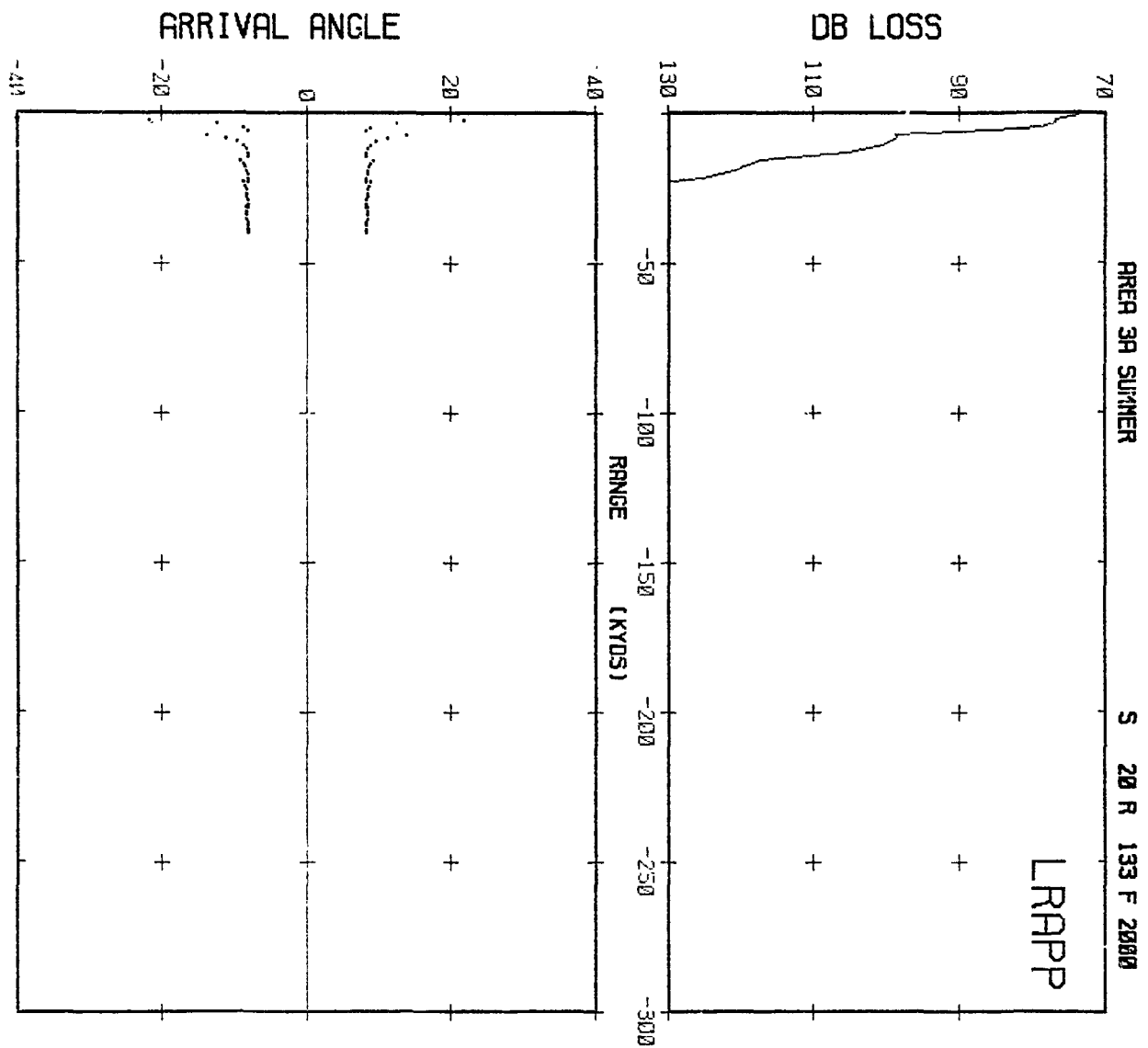


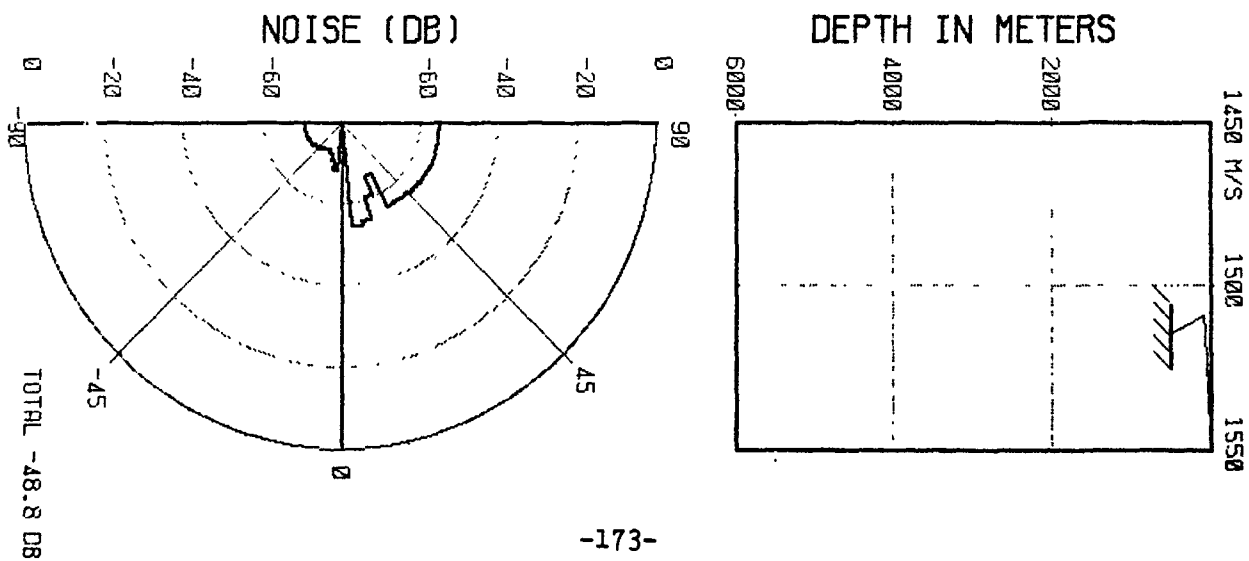
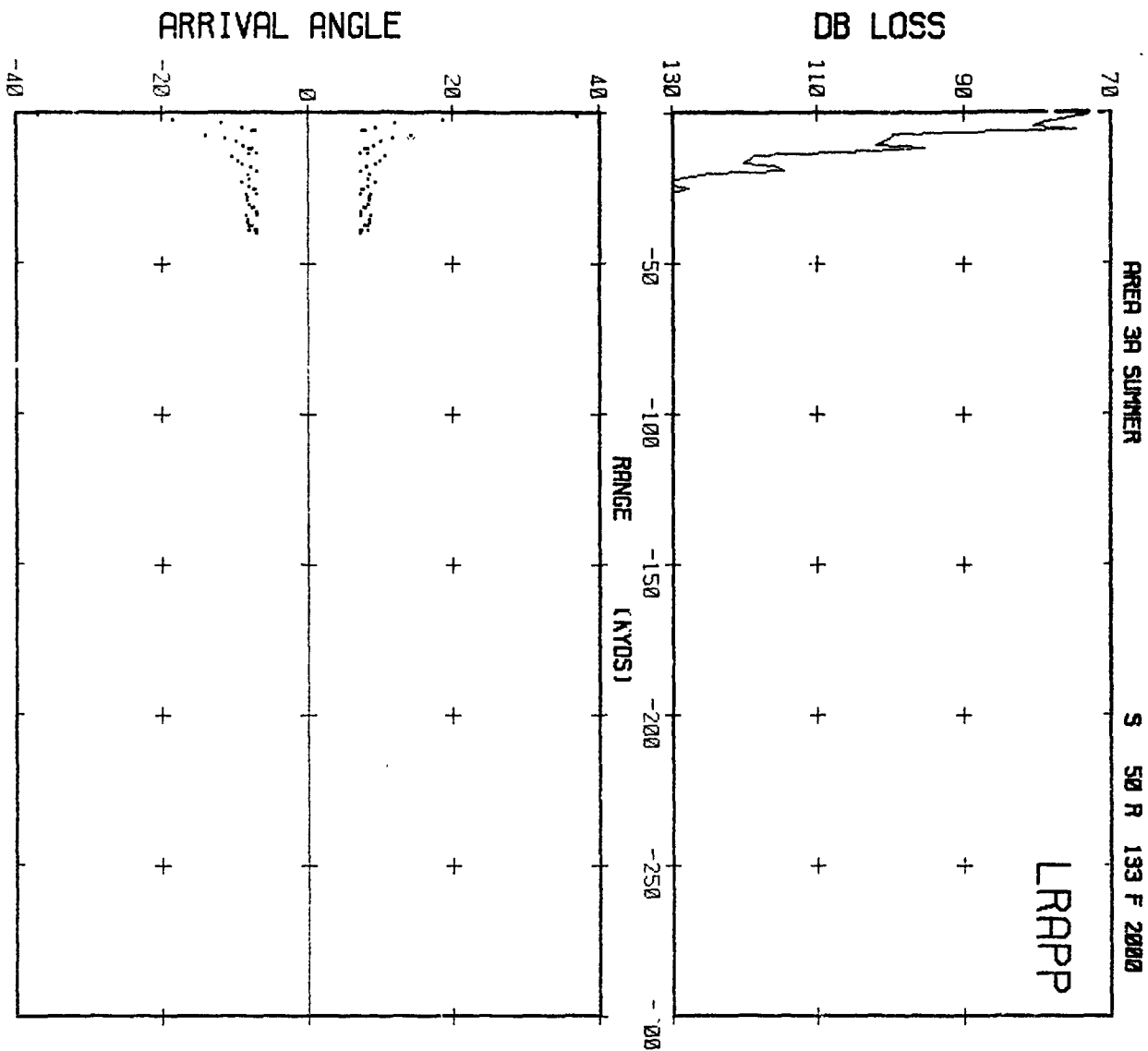


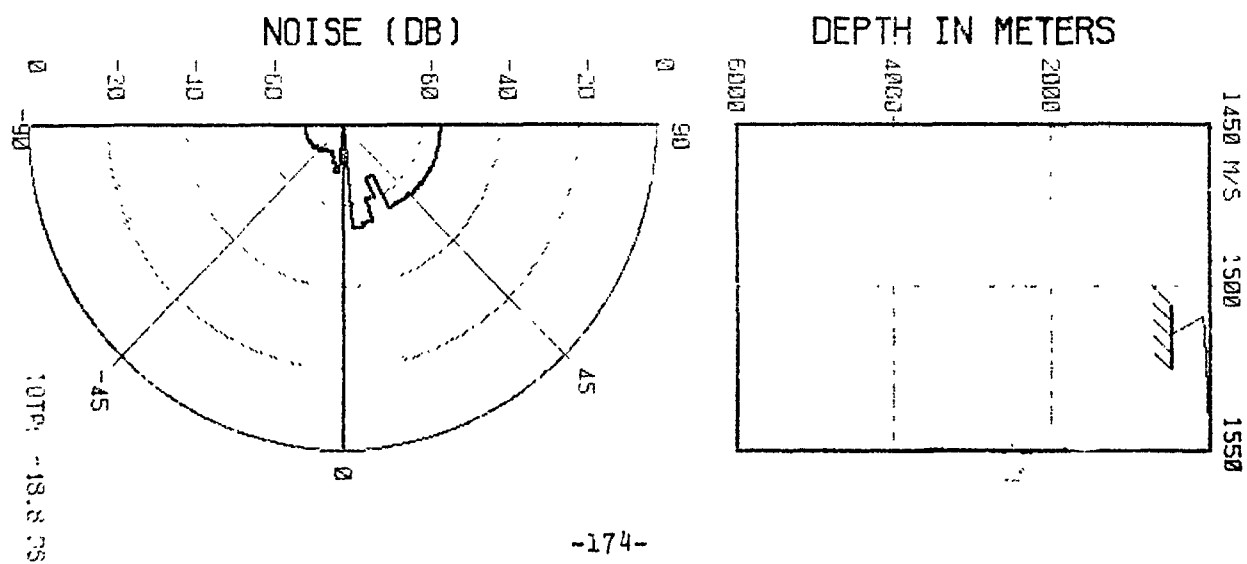
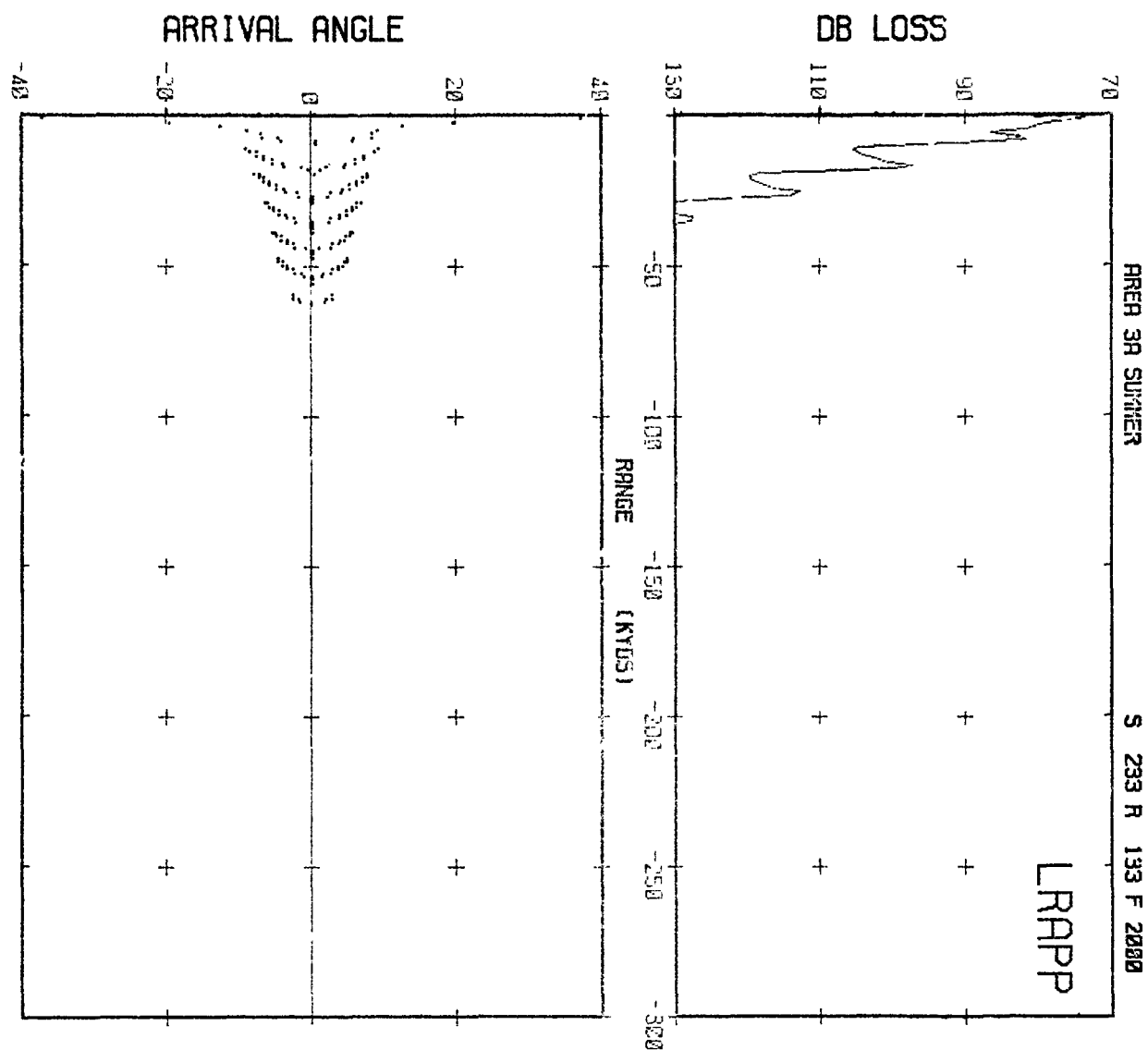












AREA 3R SUMNER

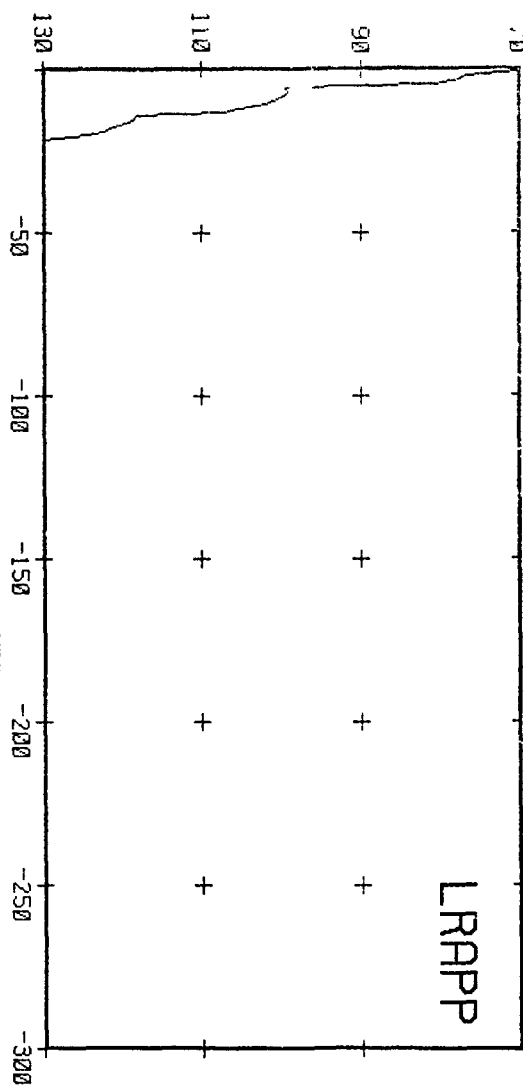
S 20 R 262 F 2000

1450 M/S

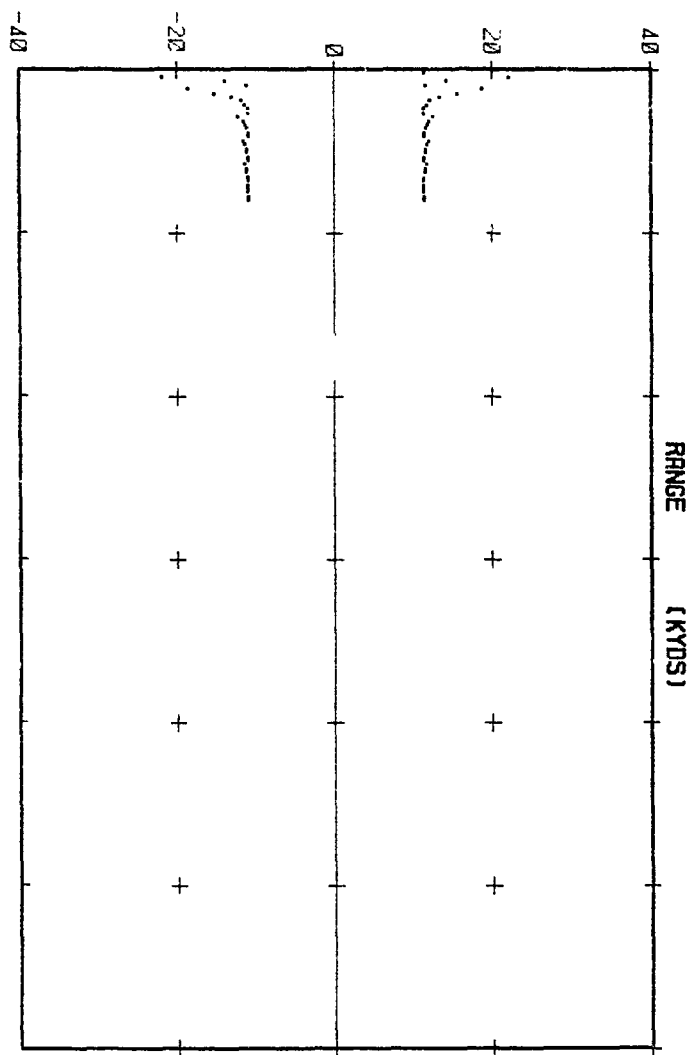
1500

1550

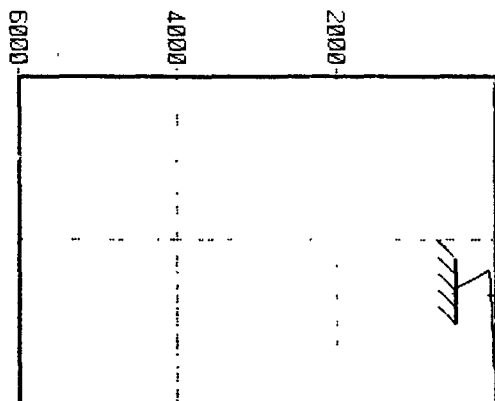
DB LOSS



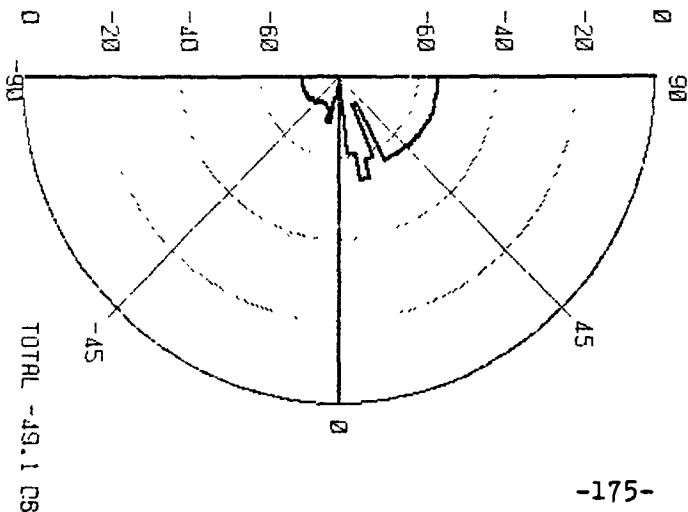
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

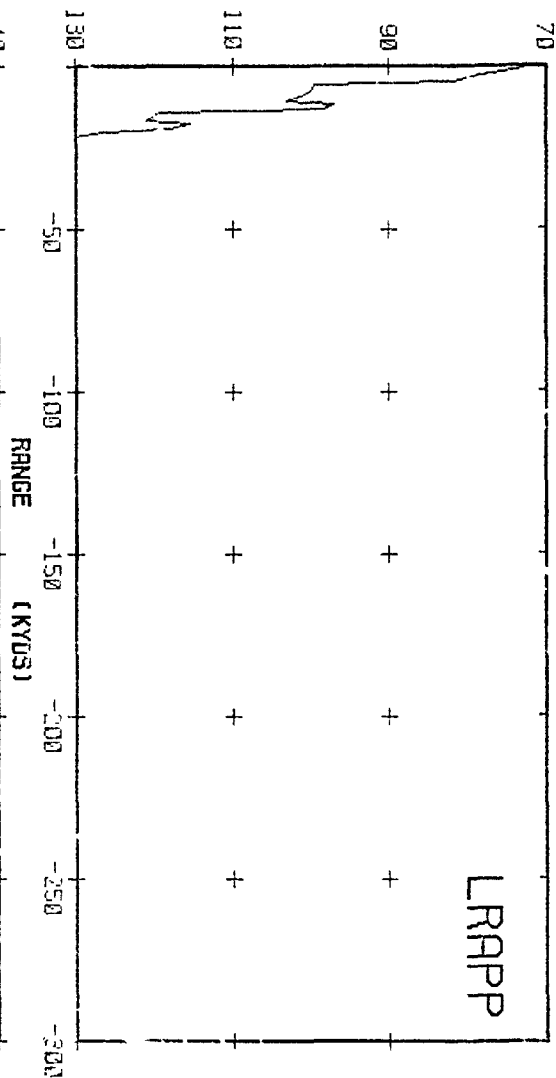


AREA 3A SUMNER

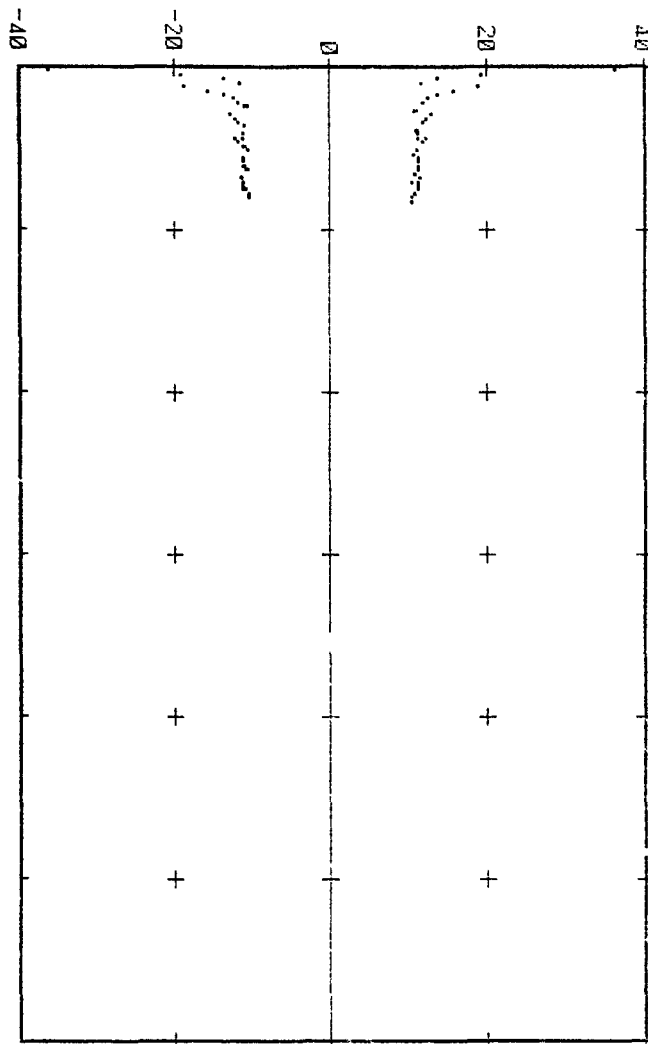
S 50 R 262 F 2000

1450 M/S 1500 1550

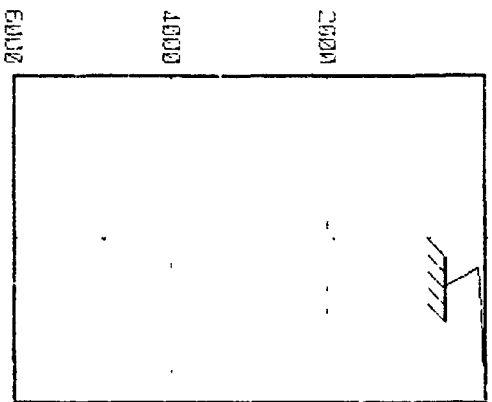
DB LOSS



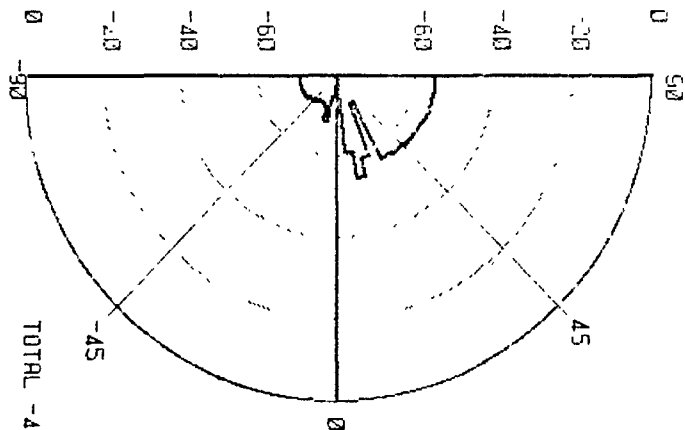
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

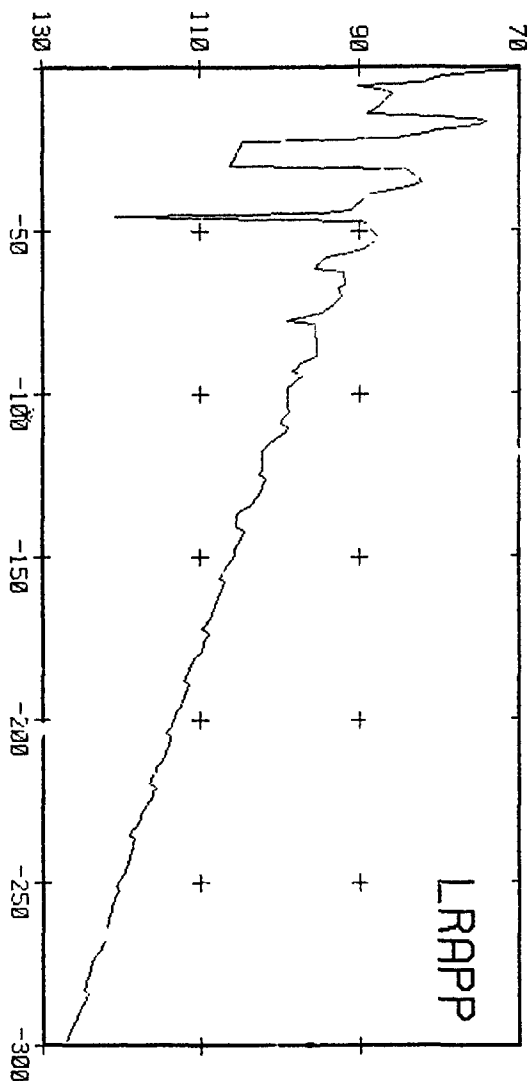


AREA 3N SWINER

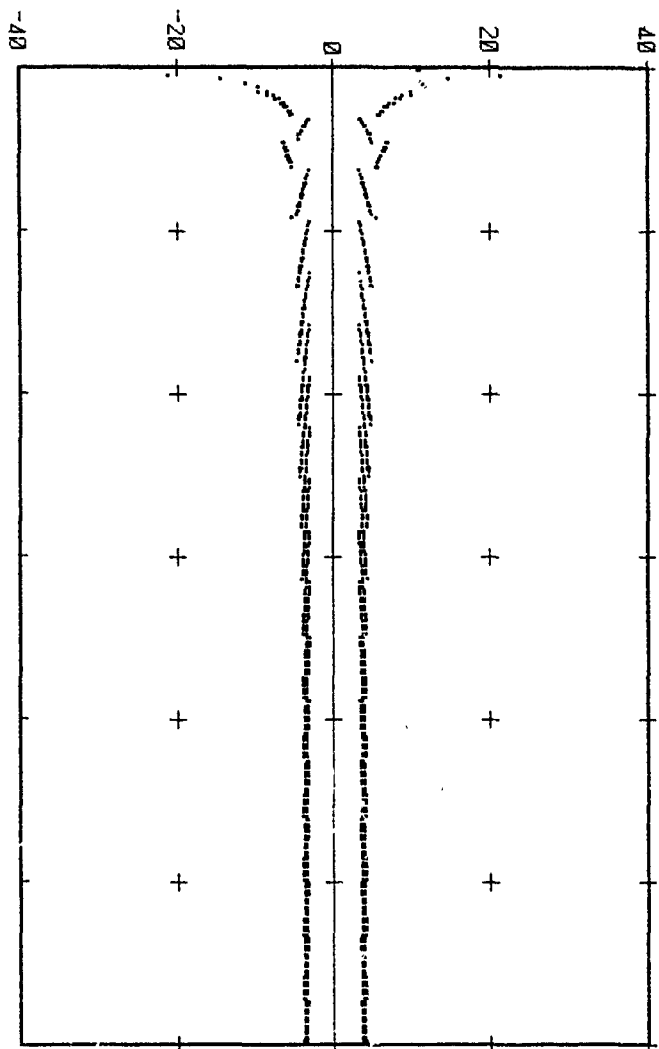
S 233 R 262 F 2000

1450 M/S 1500 1550

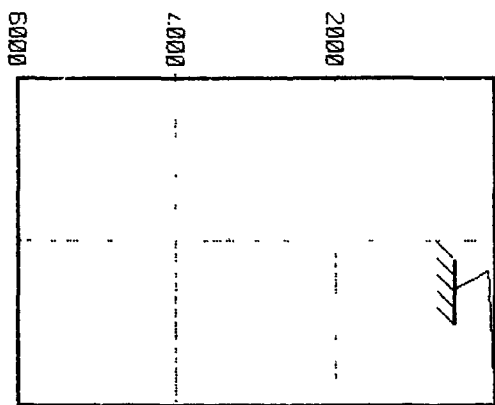
DB LOSS



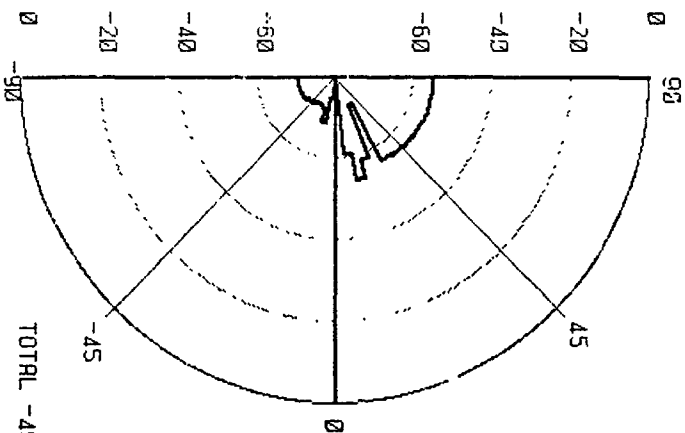
ARRIVAL ANGLE



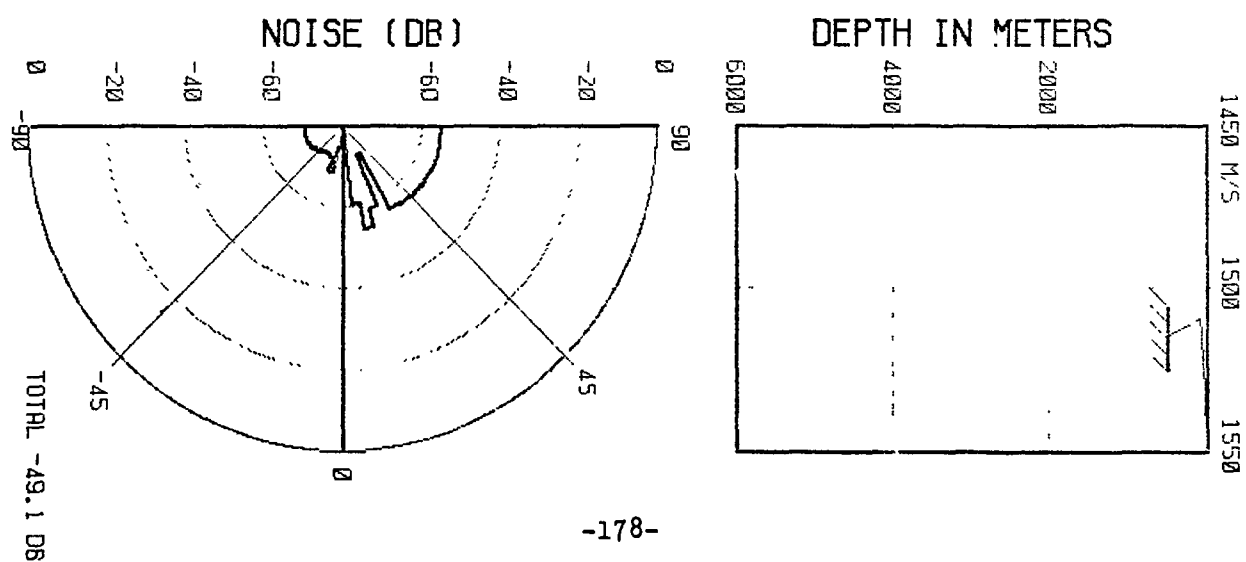
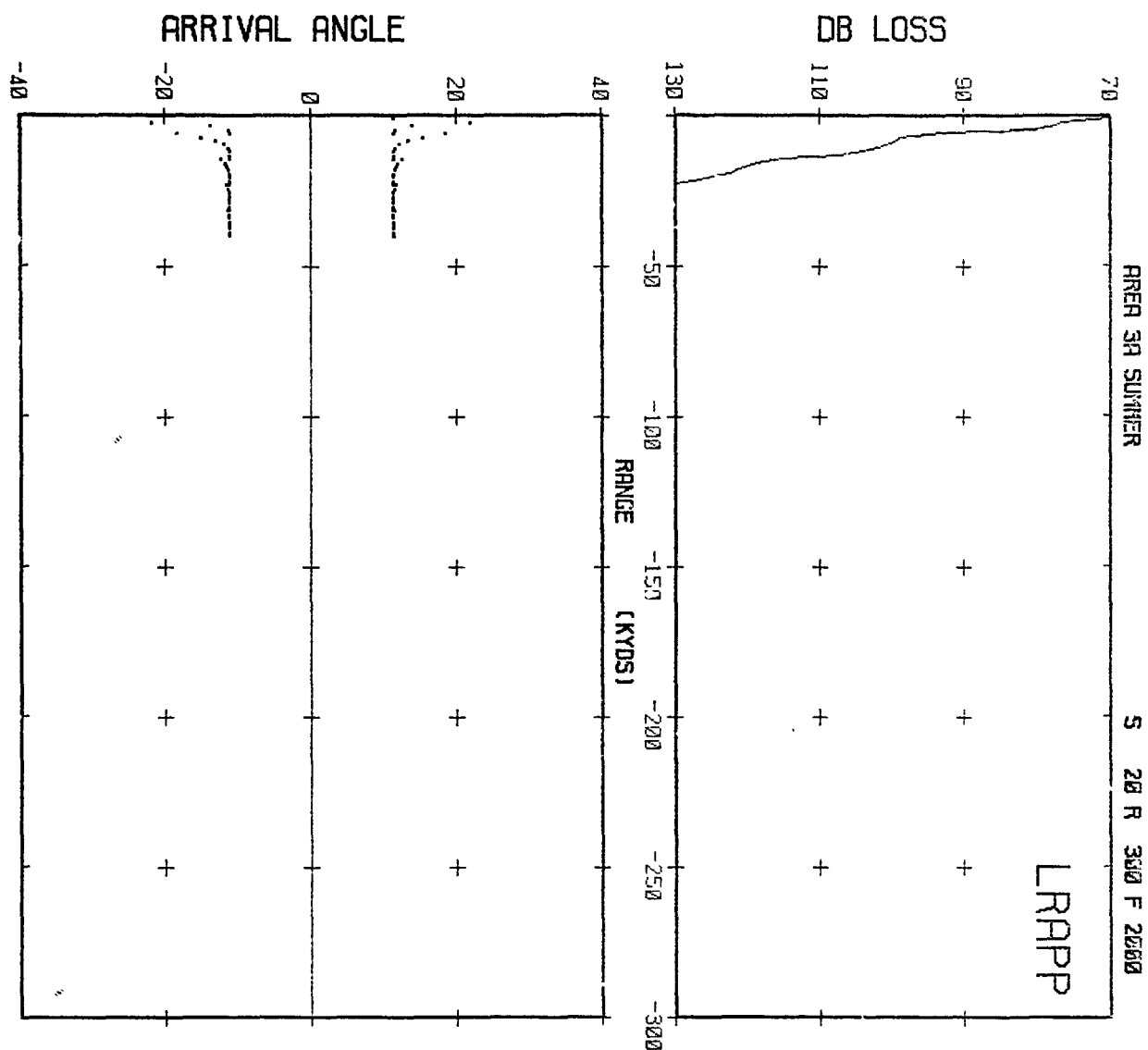
DEPTH IN METERS

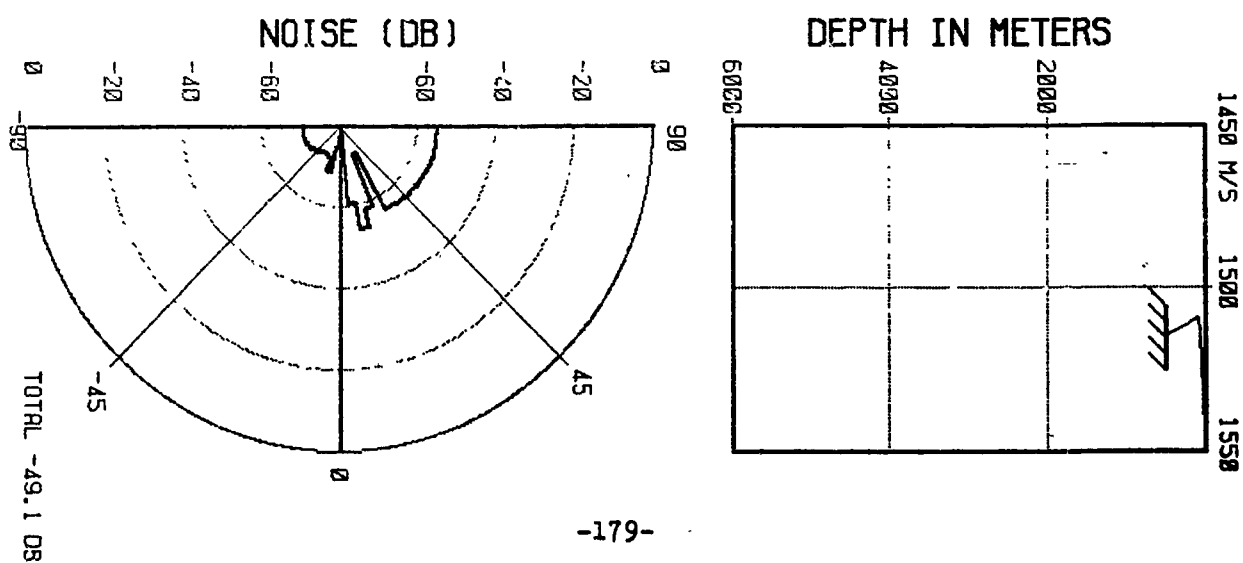
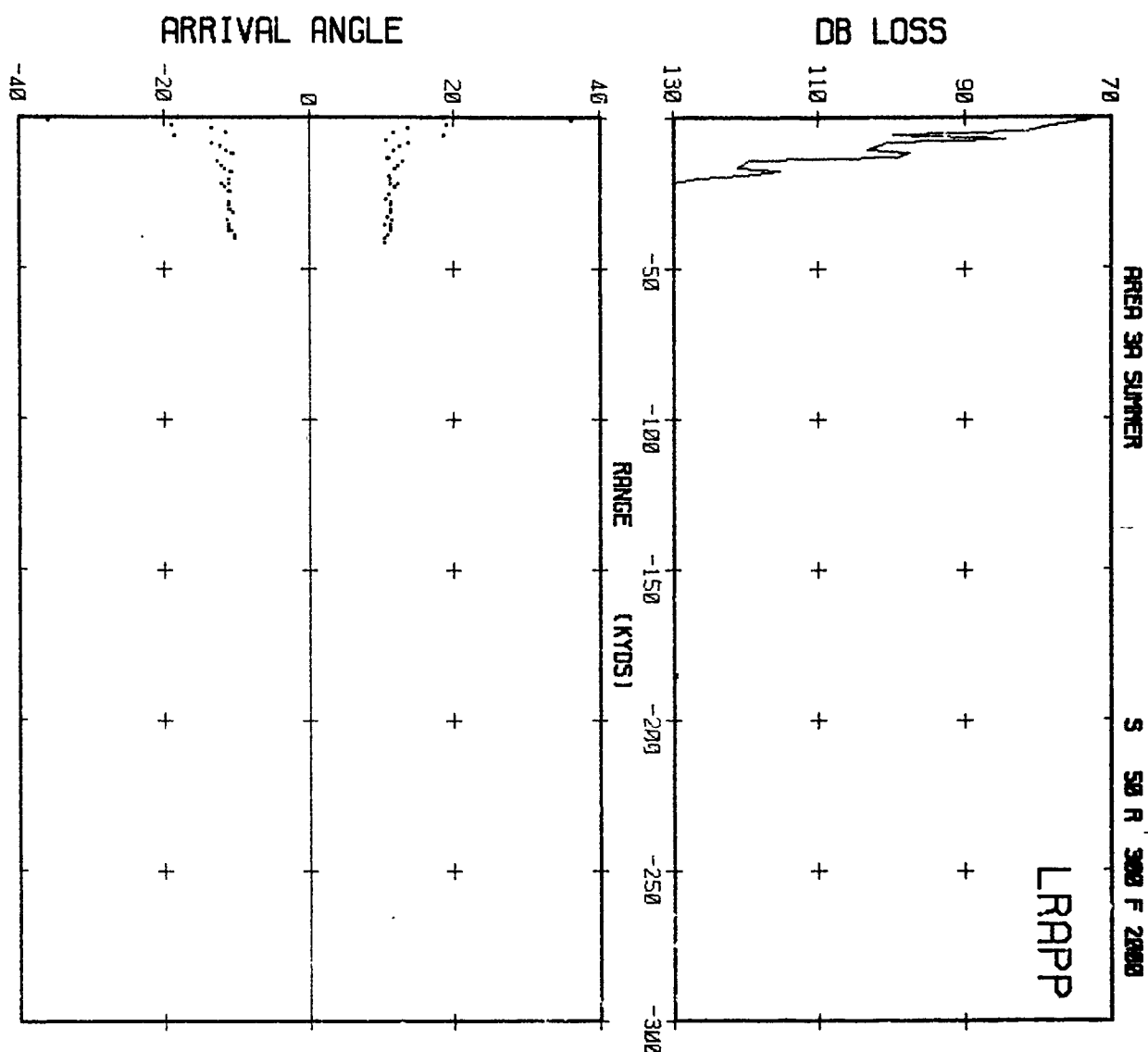


NOISE (DB)



TOTAL -49.1 DB





ARER 3R SUMMER

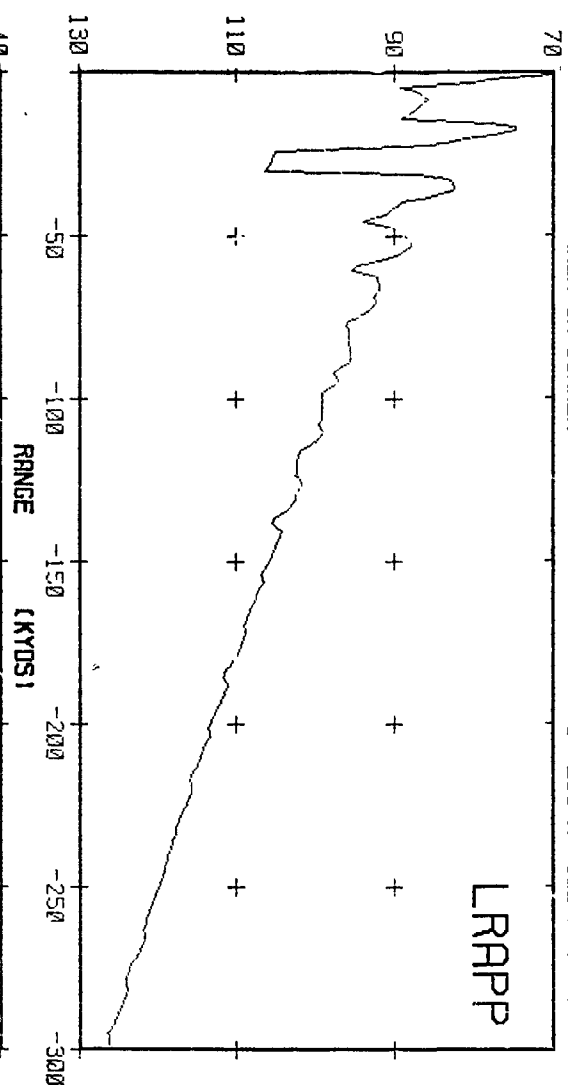
S 233 R 300 F 2000

1450 M/S

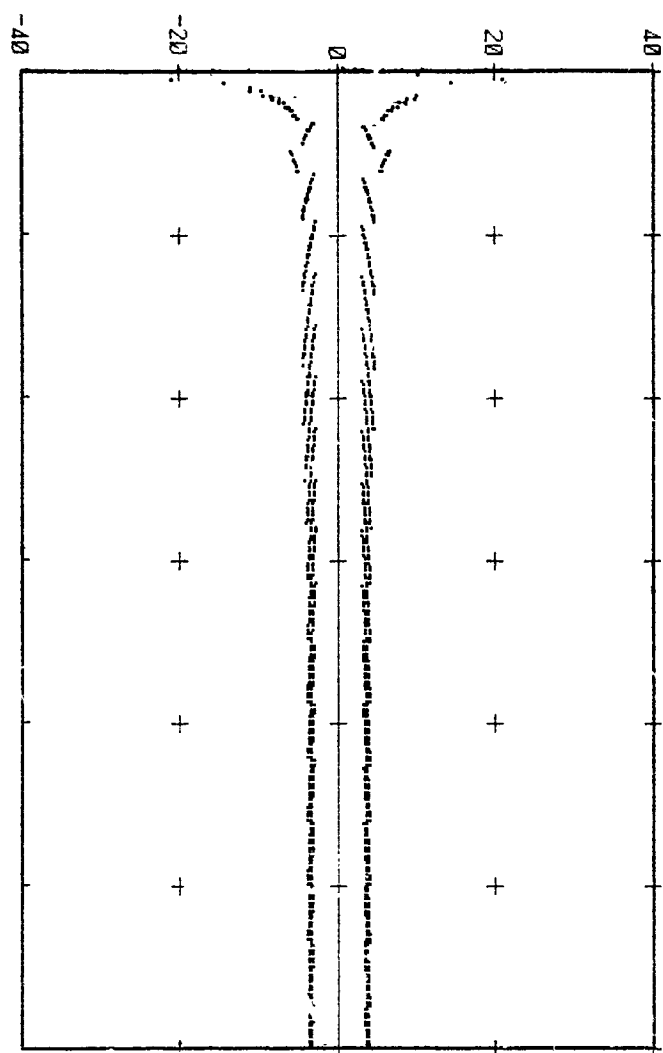
1500

1550

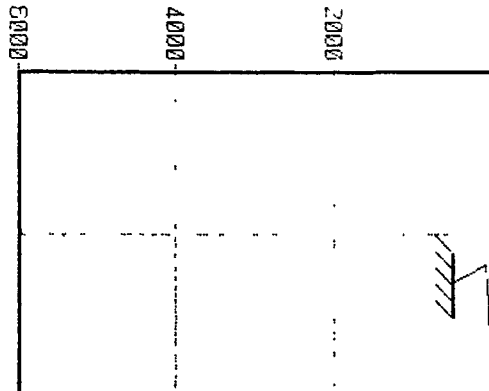
DB LOSS



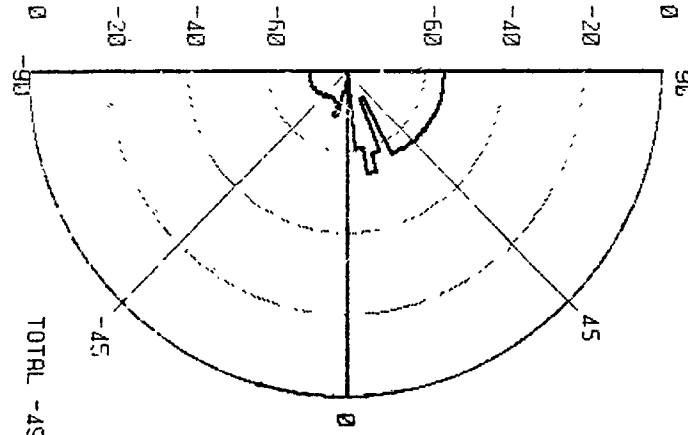
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

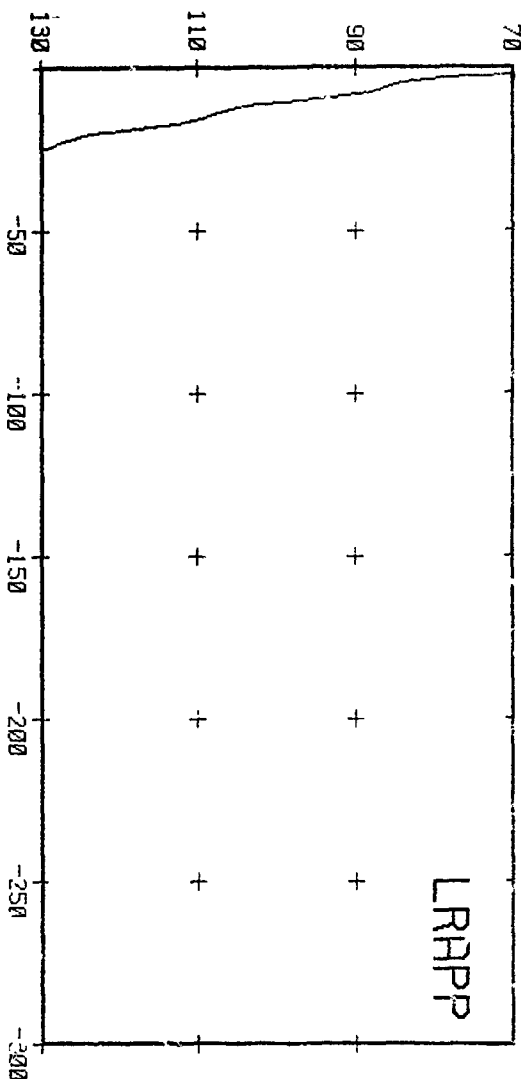


ARRR 3R SUMNER

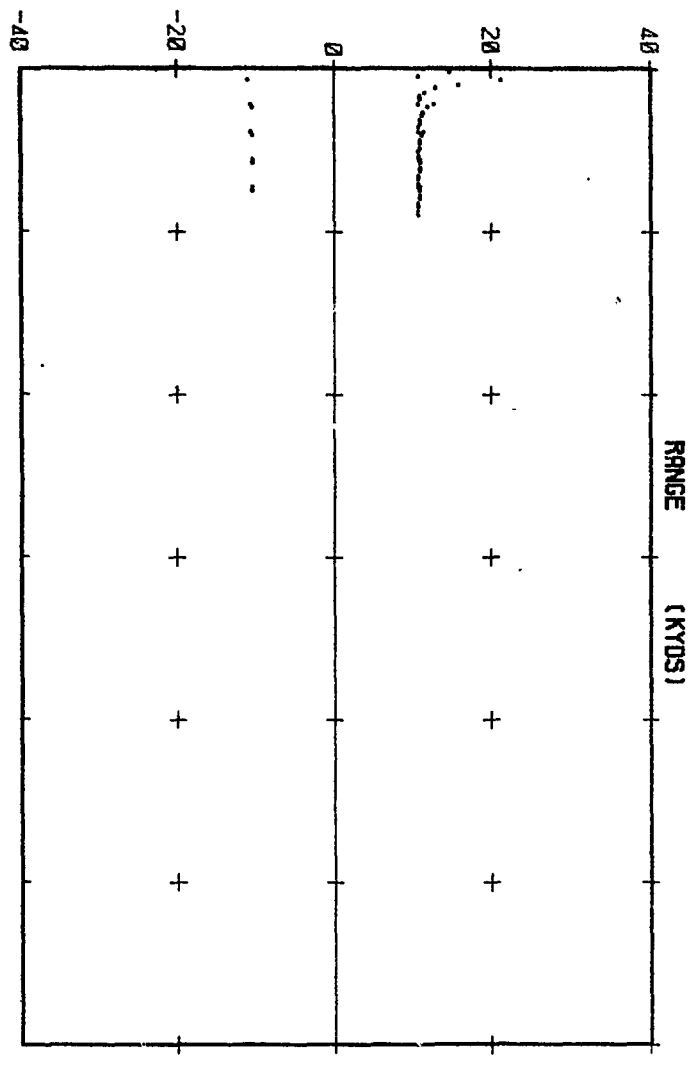
S 20 R 1000 F 2000

1450 H/S 1500 1550

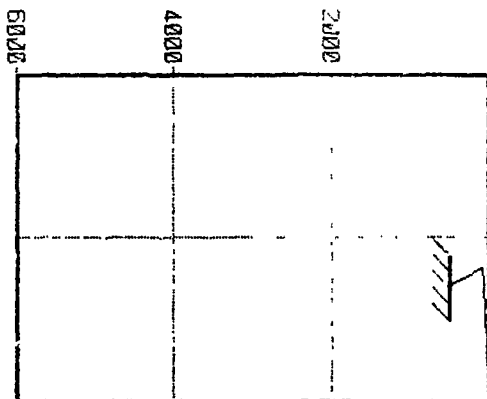
DB LOSS



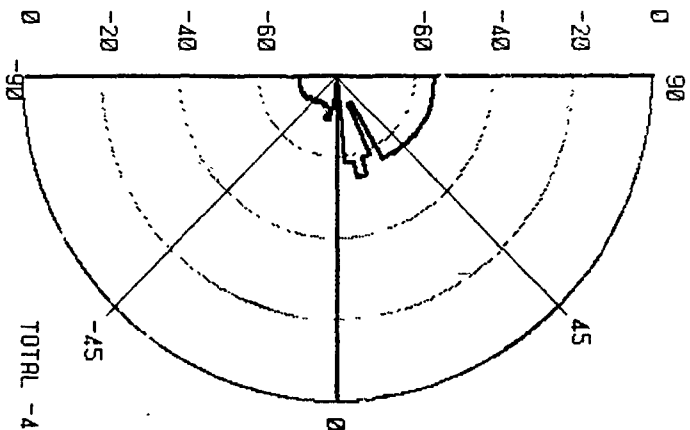
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

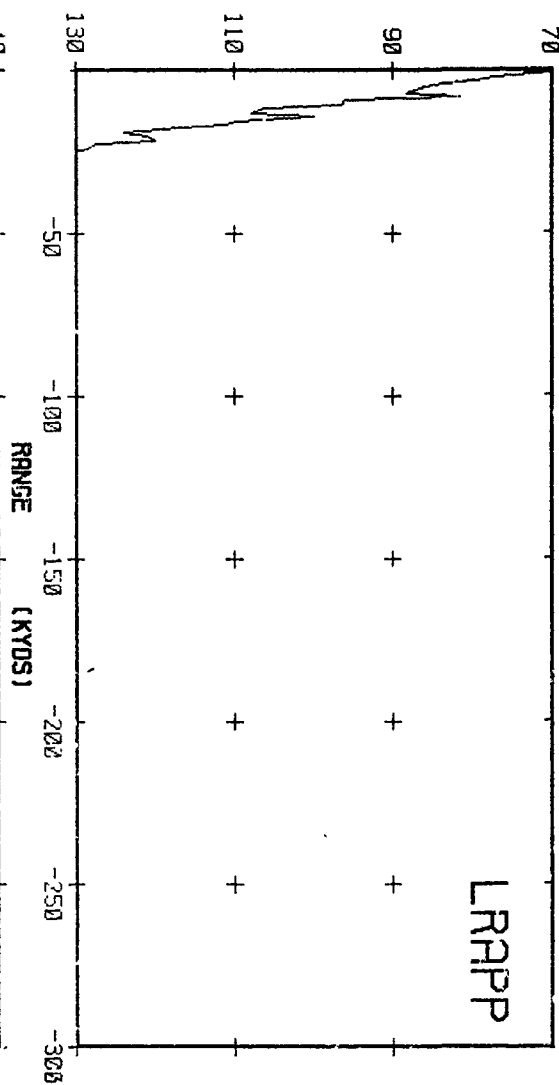


AREA 3A SUMMER

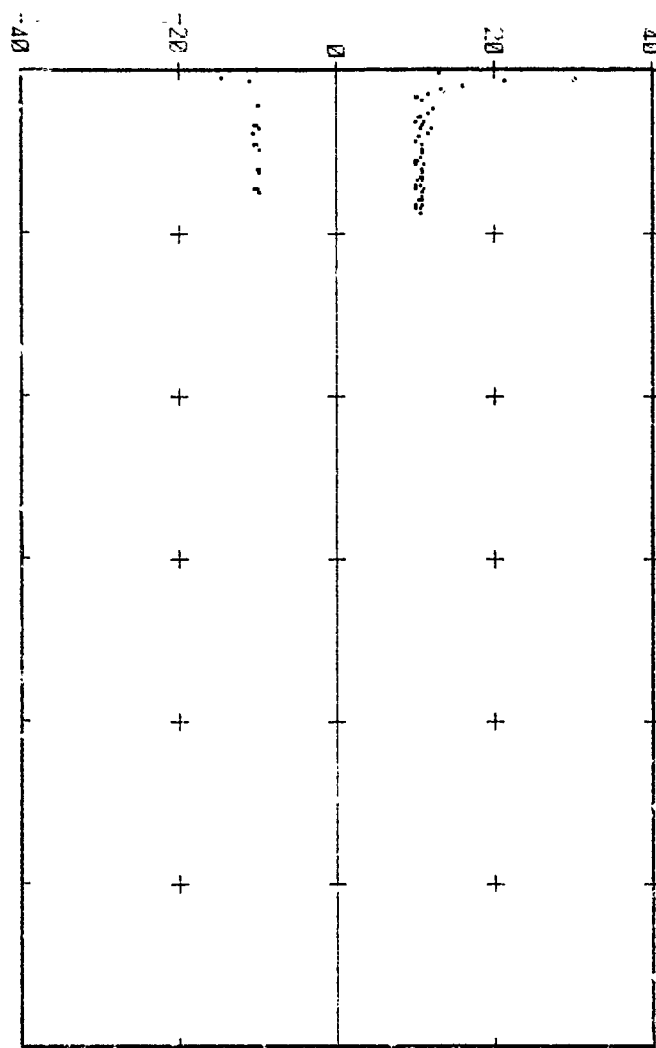
S 50 R 1000 F 2000

1450 M/S 1500 1550

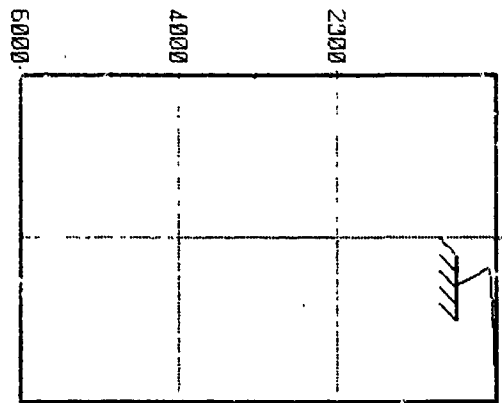
DB LOSS



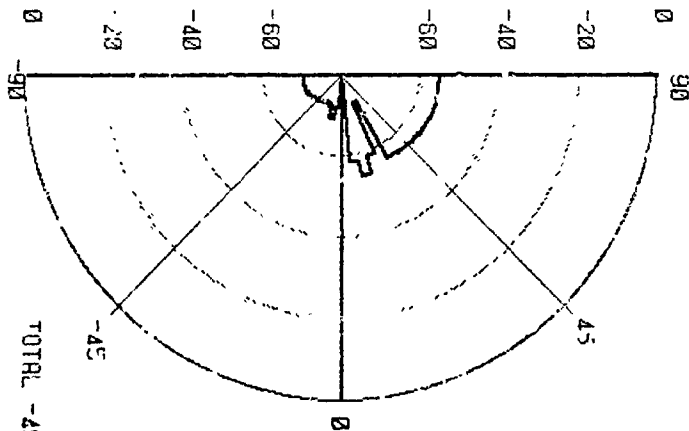
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

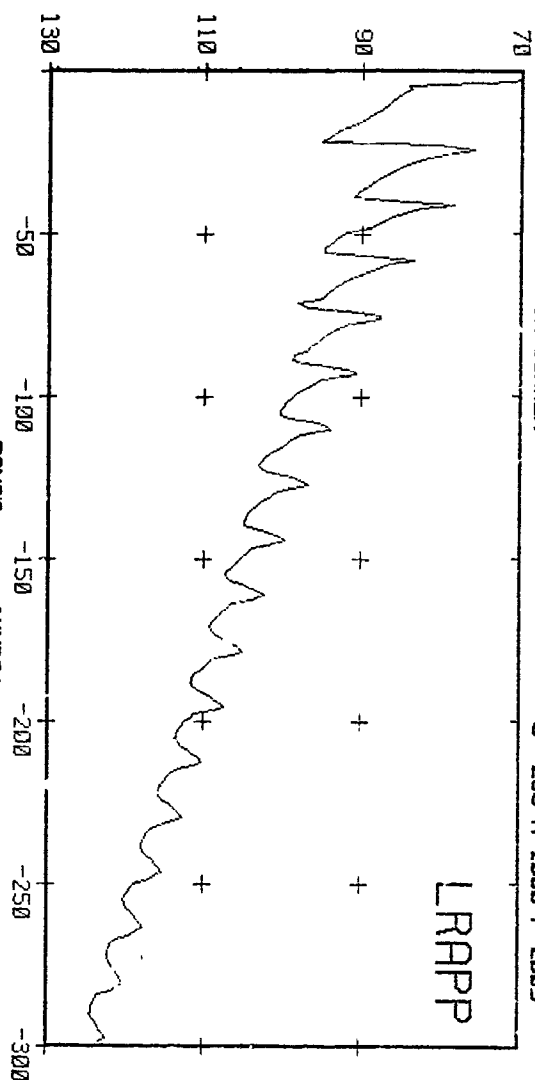


AREA 3A SUMMER

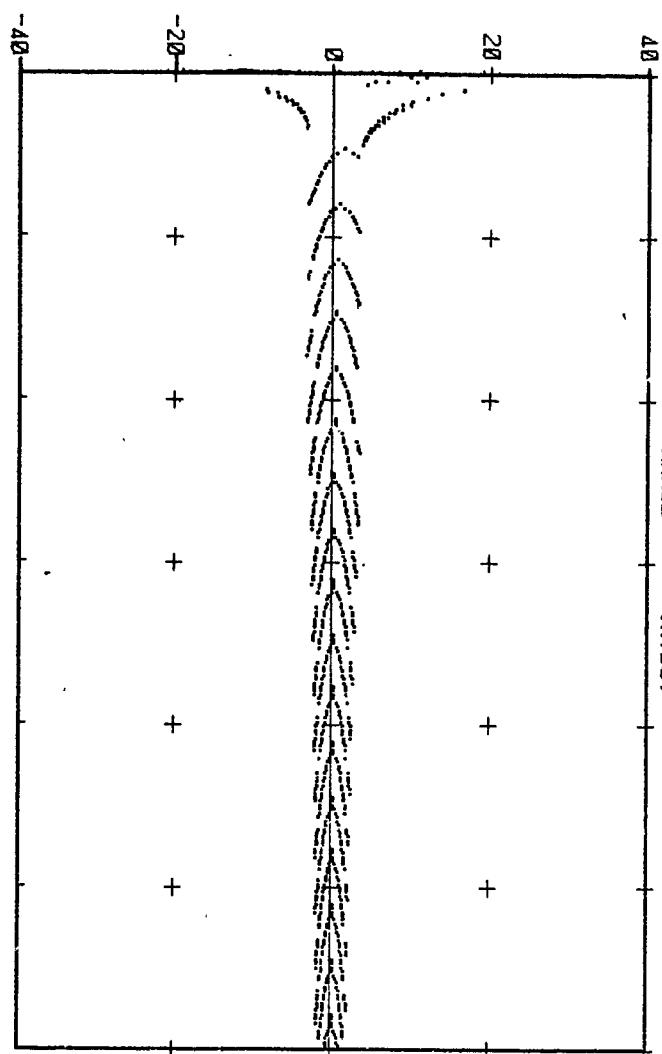
S 233 R 1000 F 2000

LRAPP

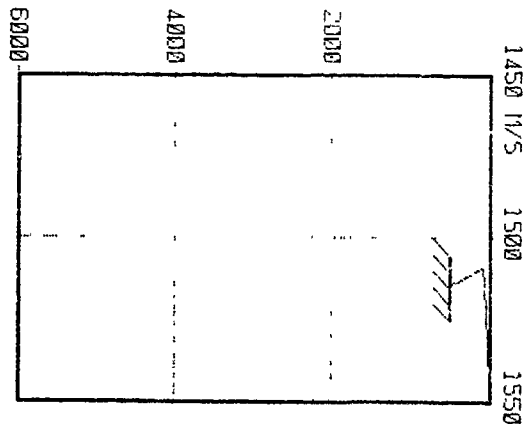
DB LOSS



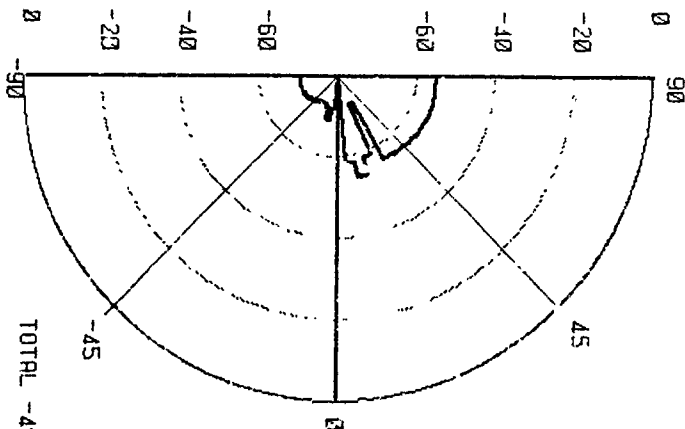
ARRIVAL ANGLE

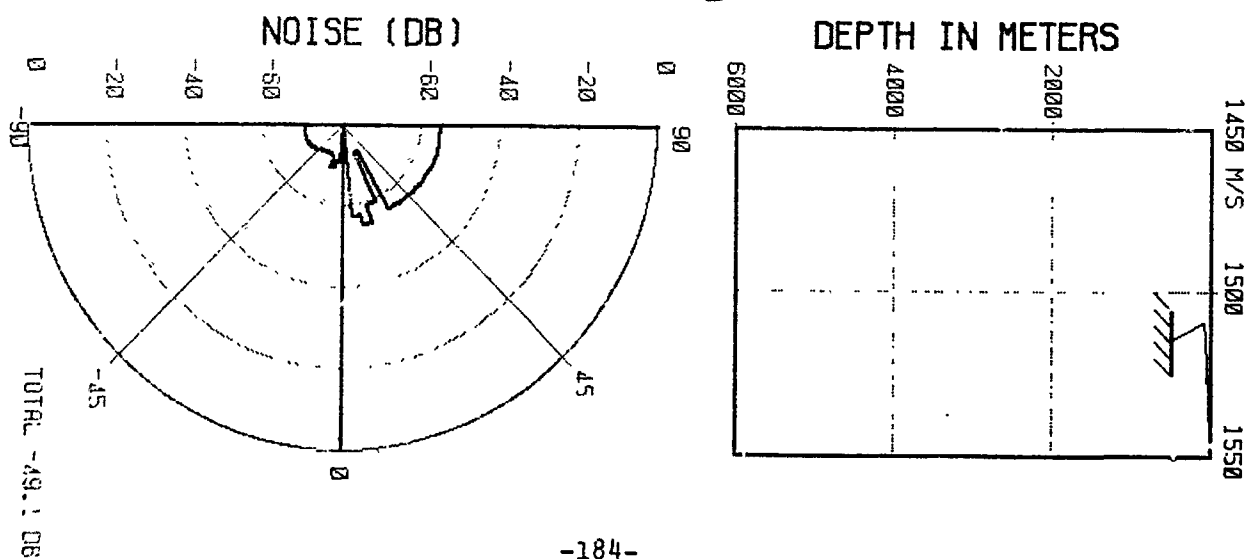
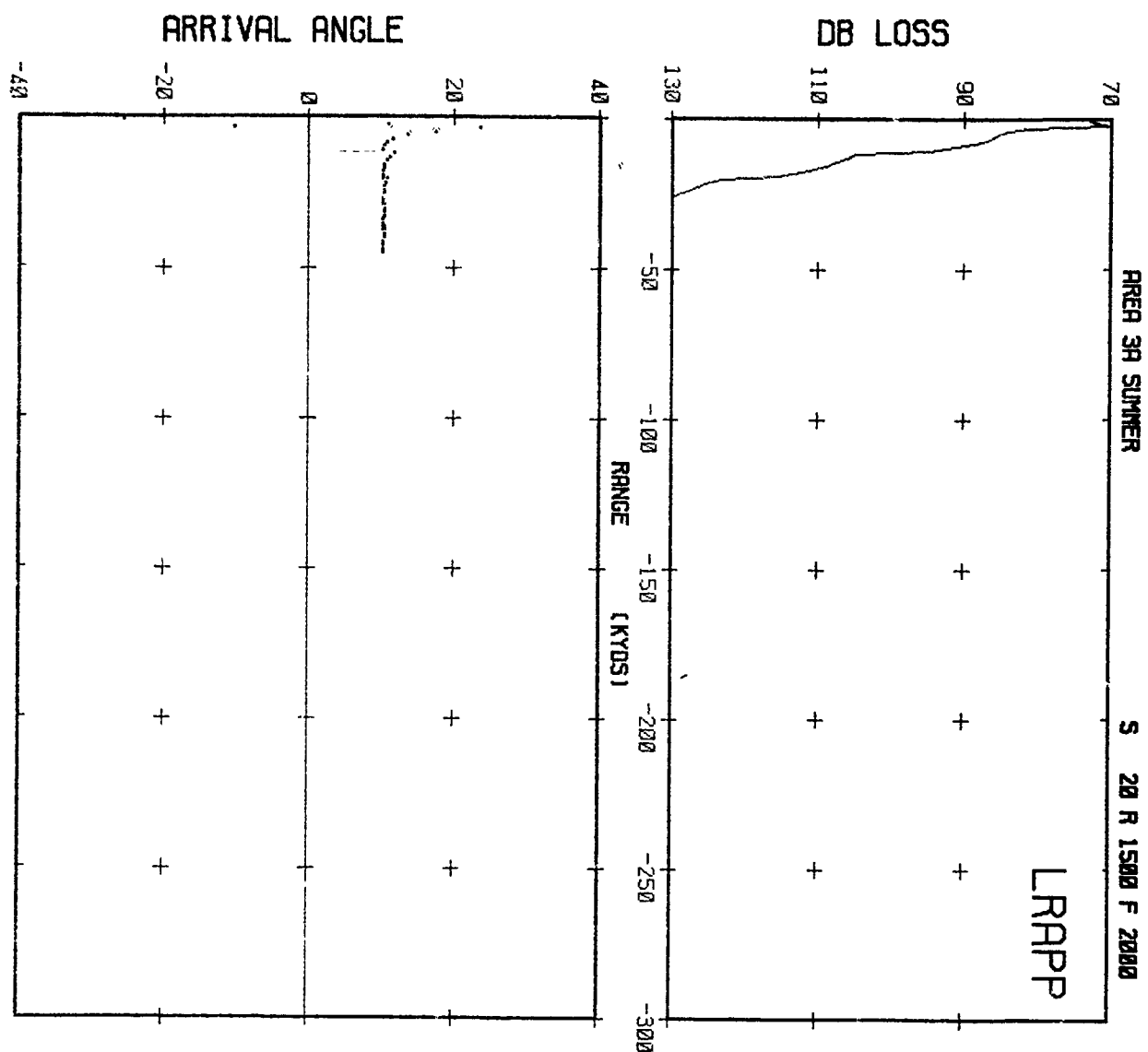


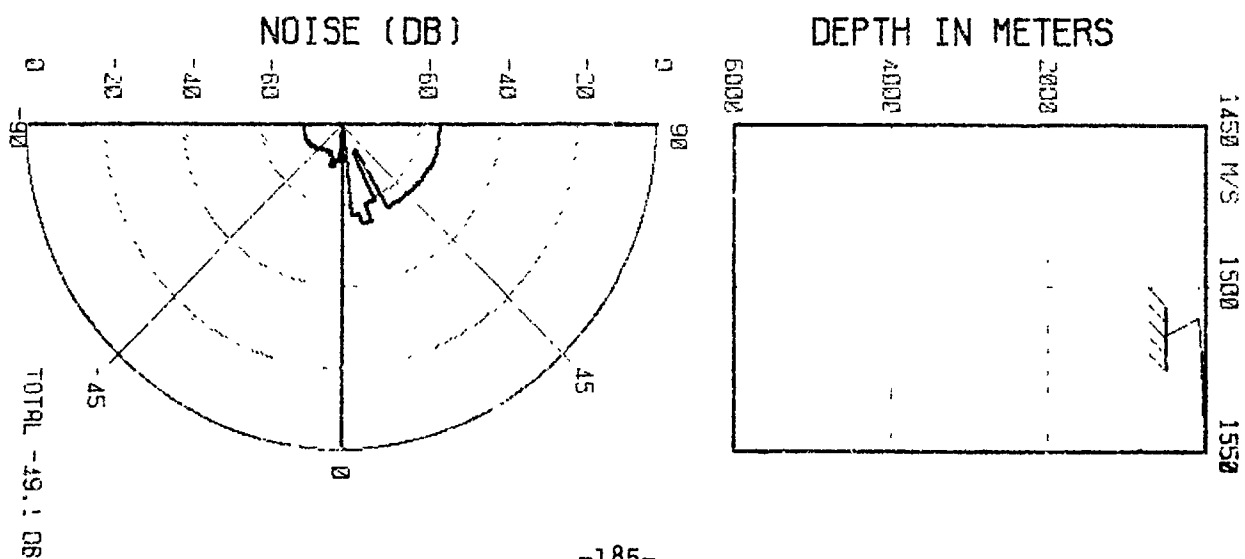
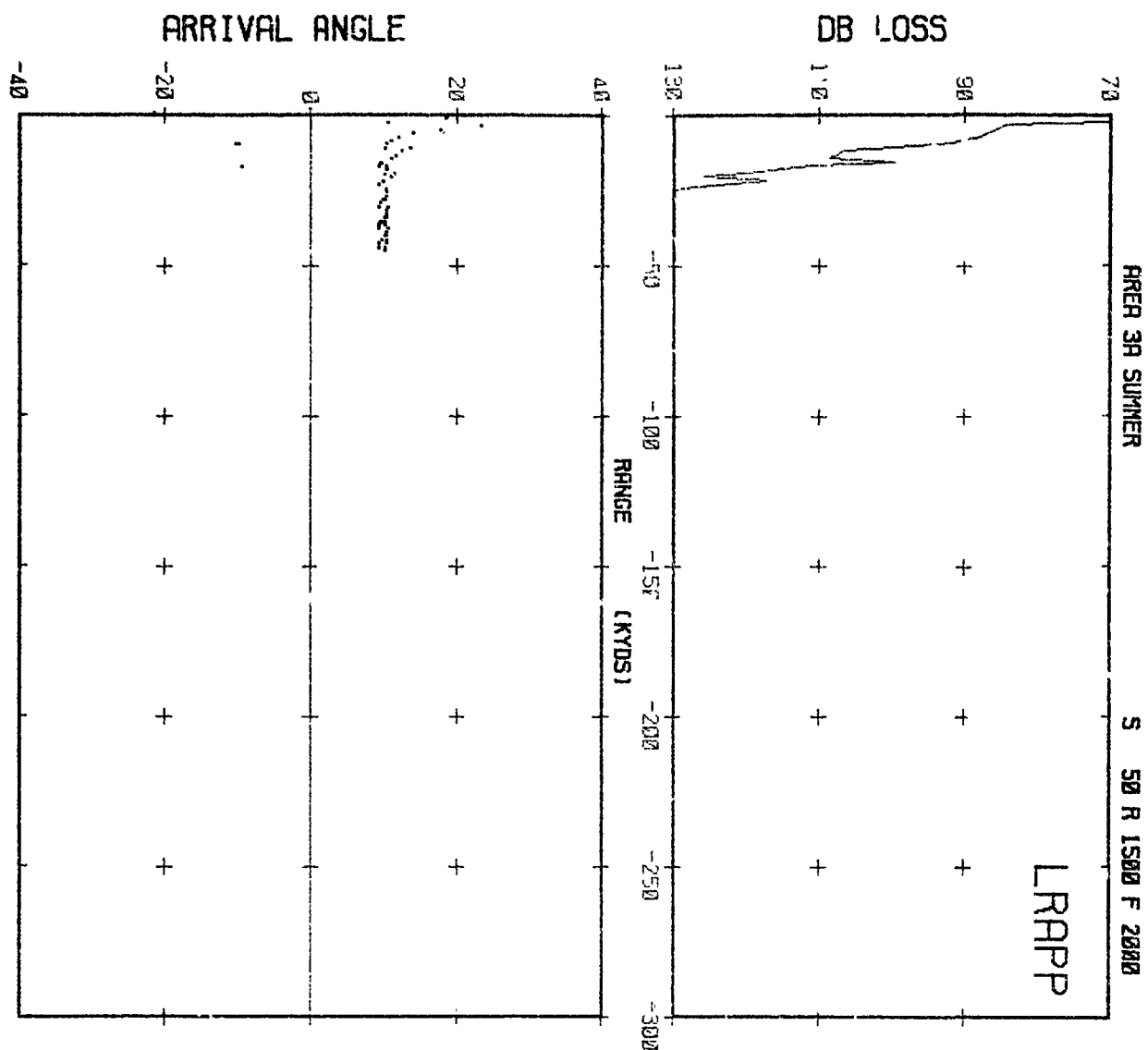
DEPTH IN METERS



NOISE (DB)







AREA 3A SUMMER

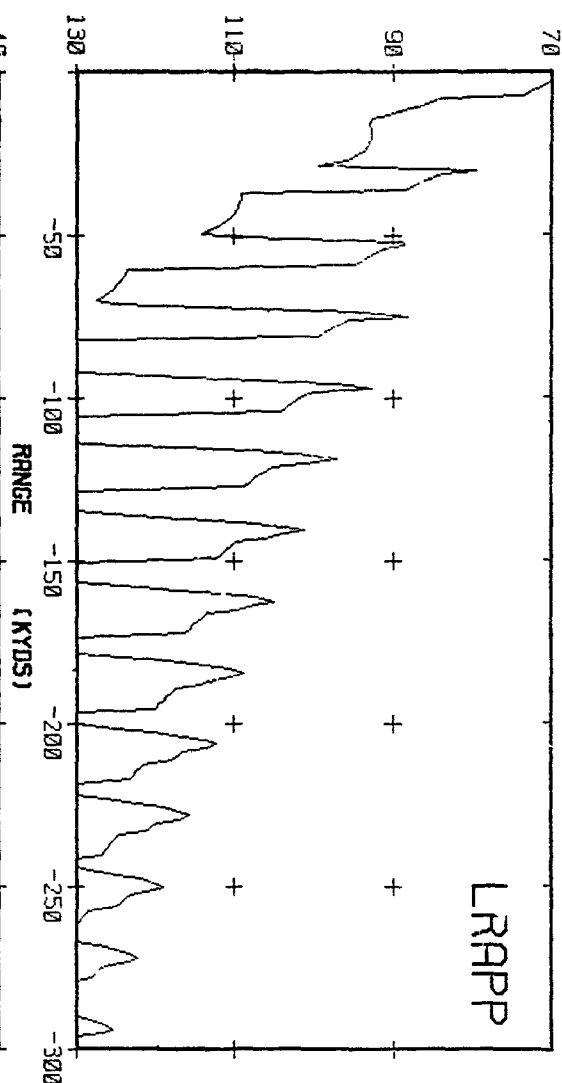
S 233 R 1500 F 2000

1450 M/S

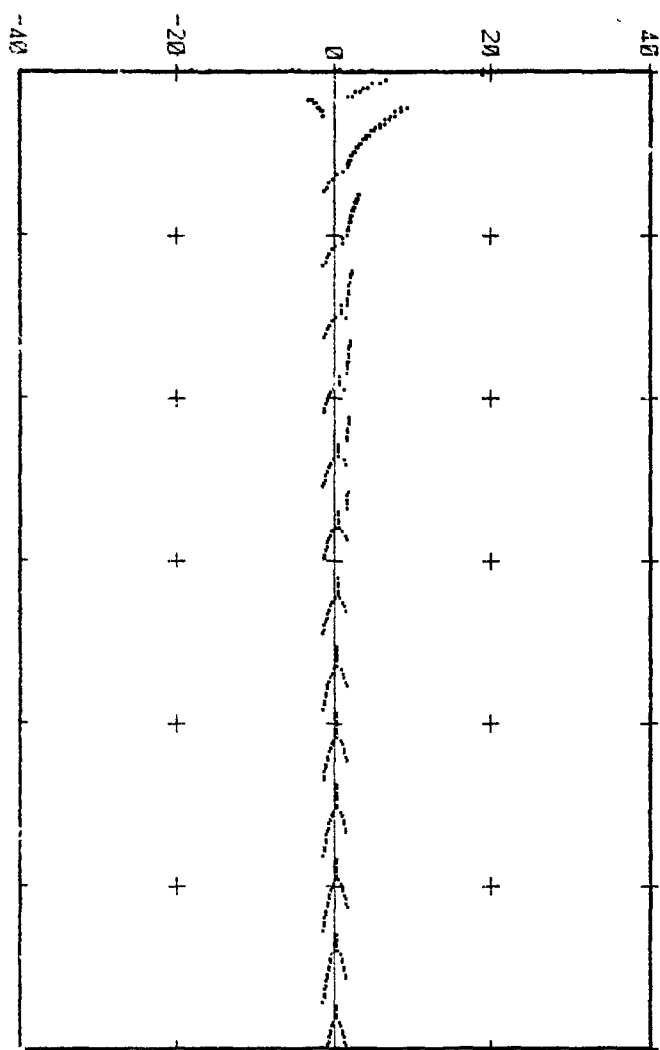
1500

1550

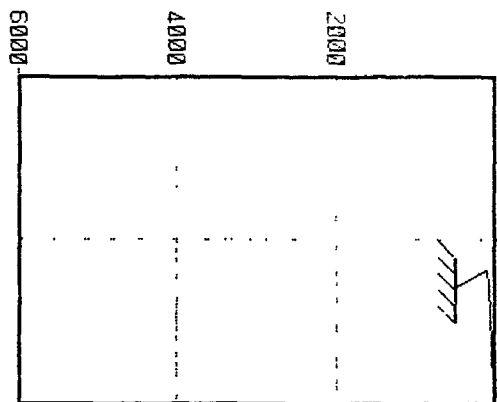
DB LOSS



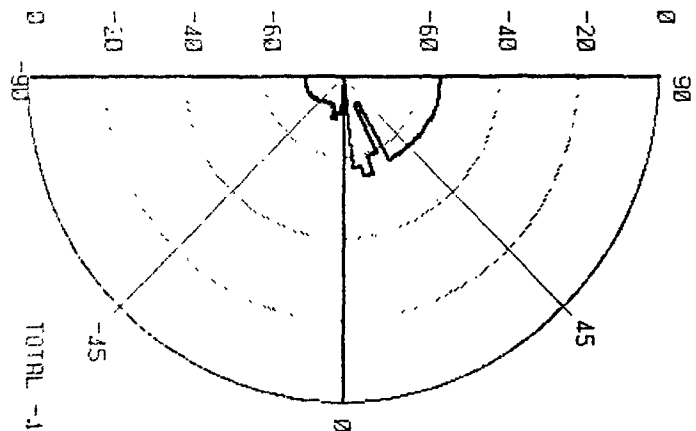
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

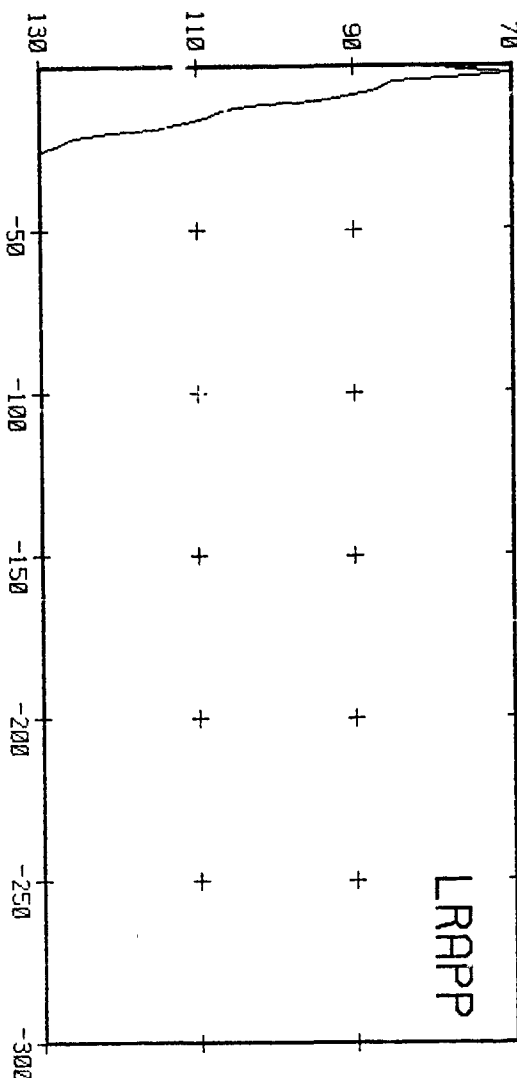


AREA 3A SUMNER

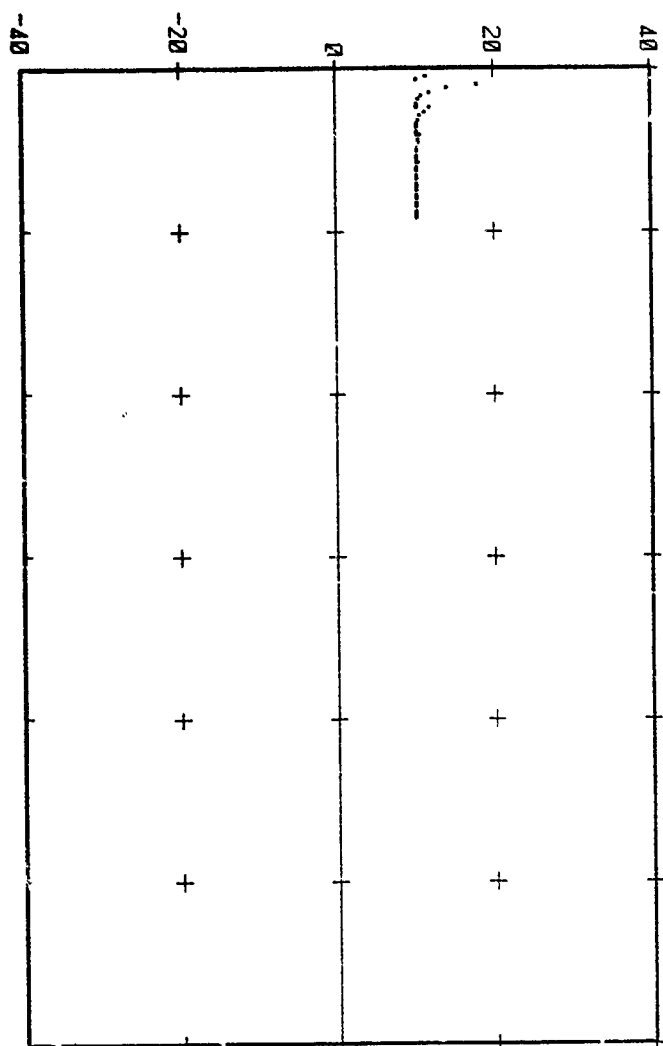
S 20 R 1640 F 2000

1450 M/S 1500 1550

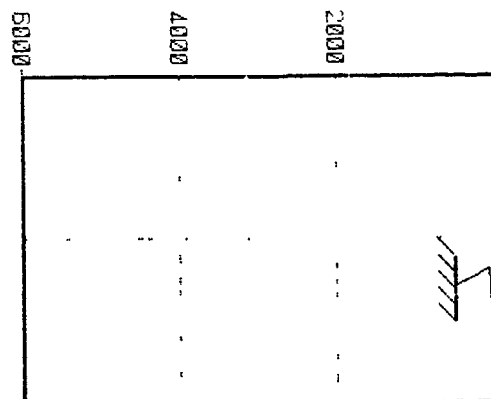
DB LOSS



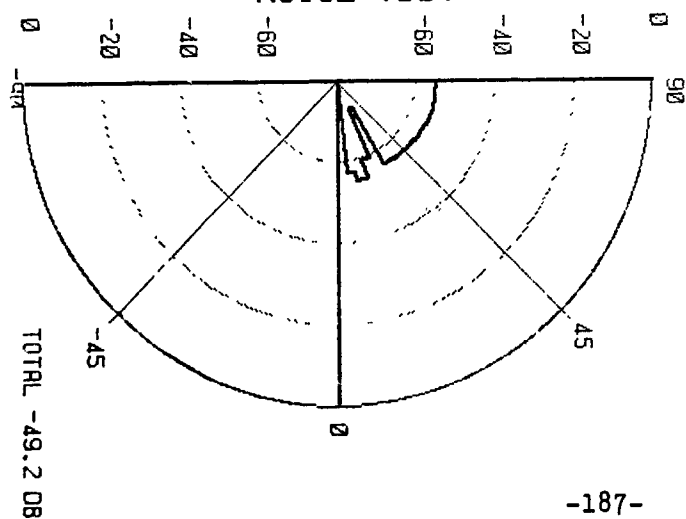
ARRIVAL ANGLE

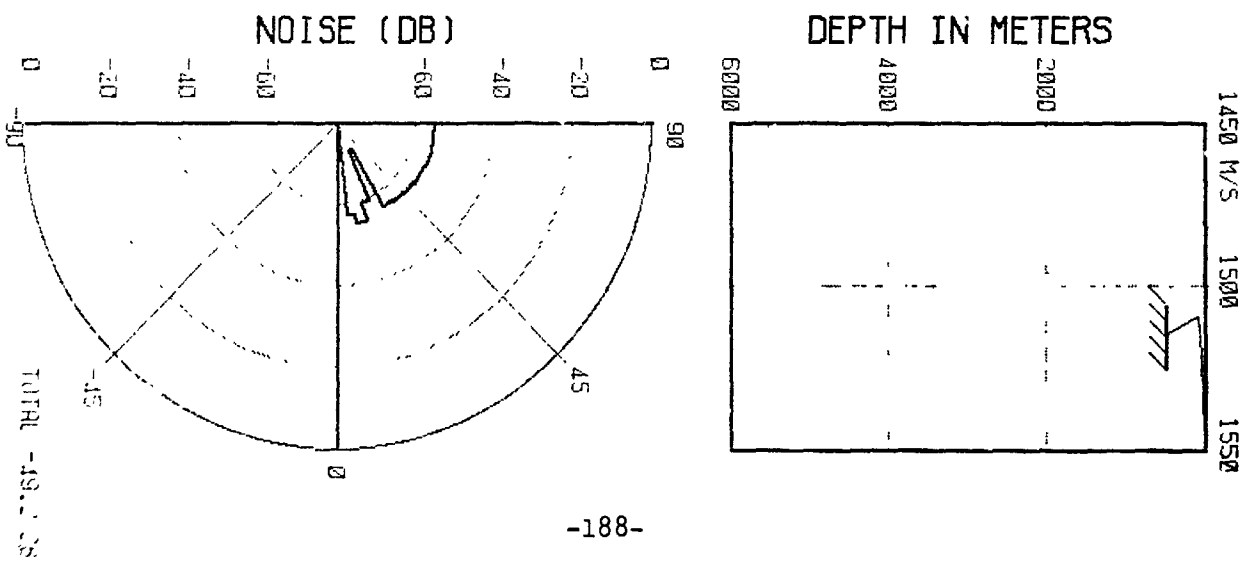
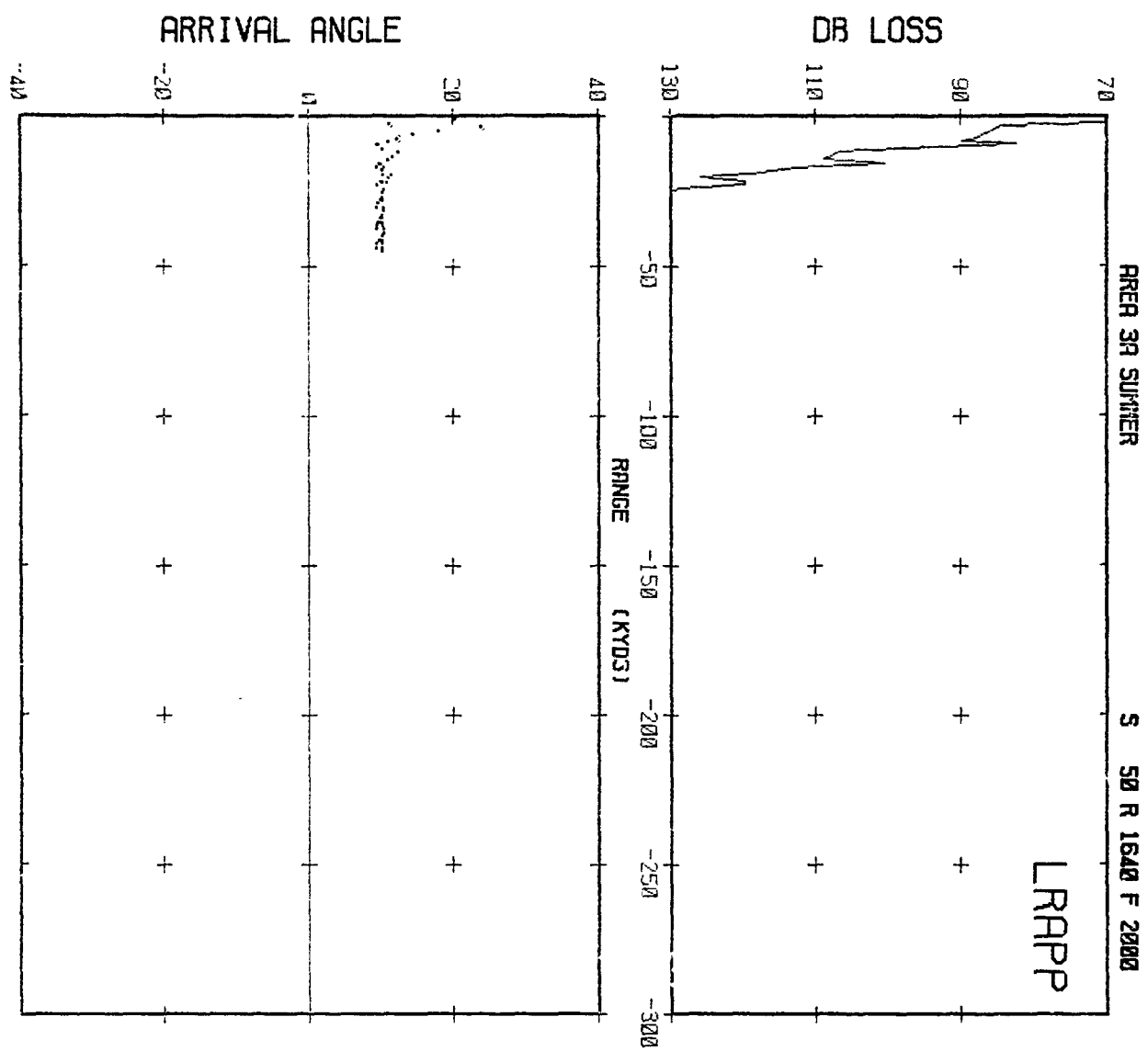


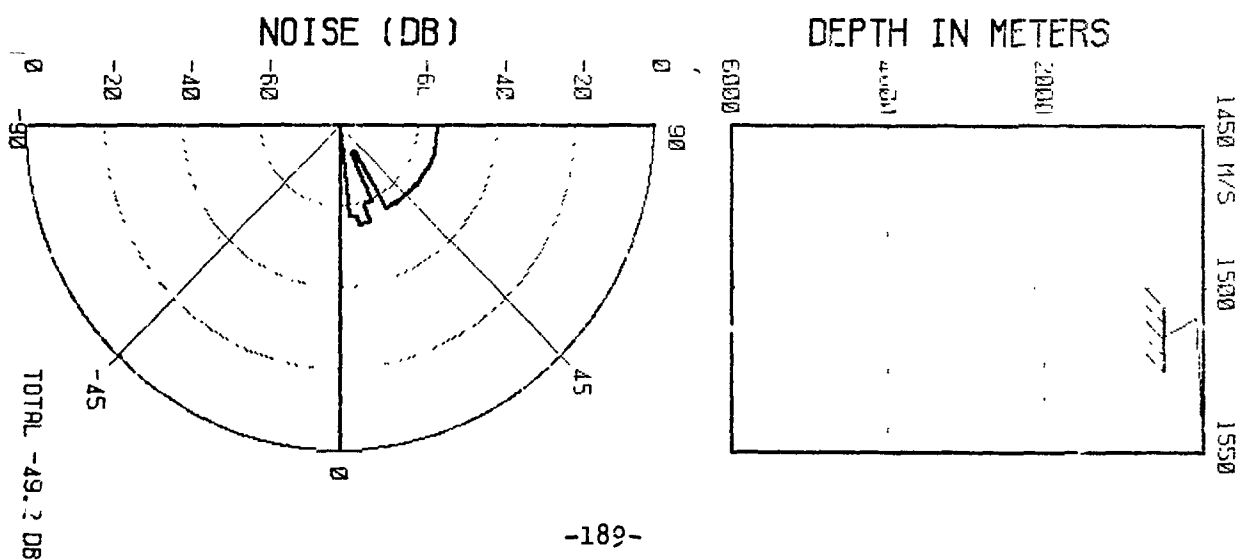
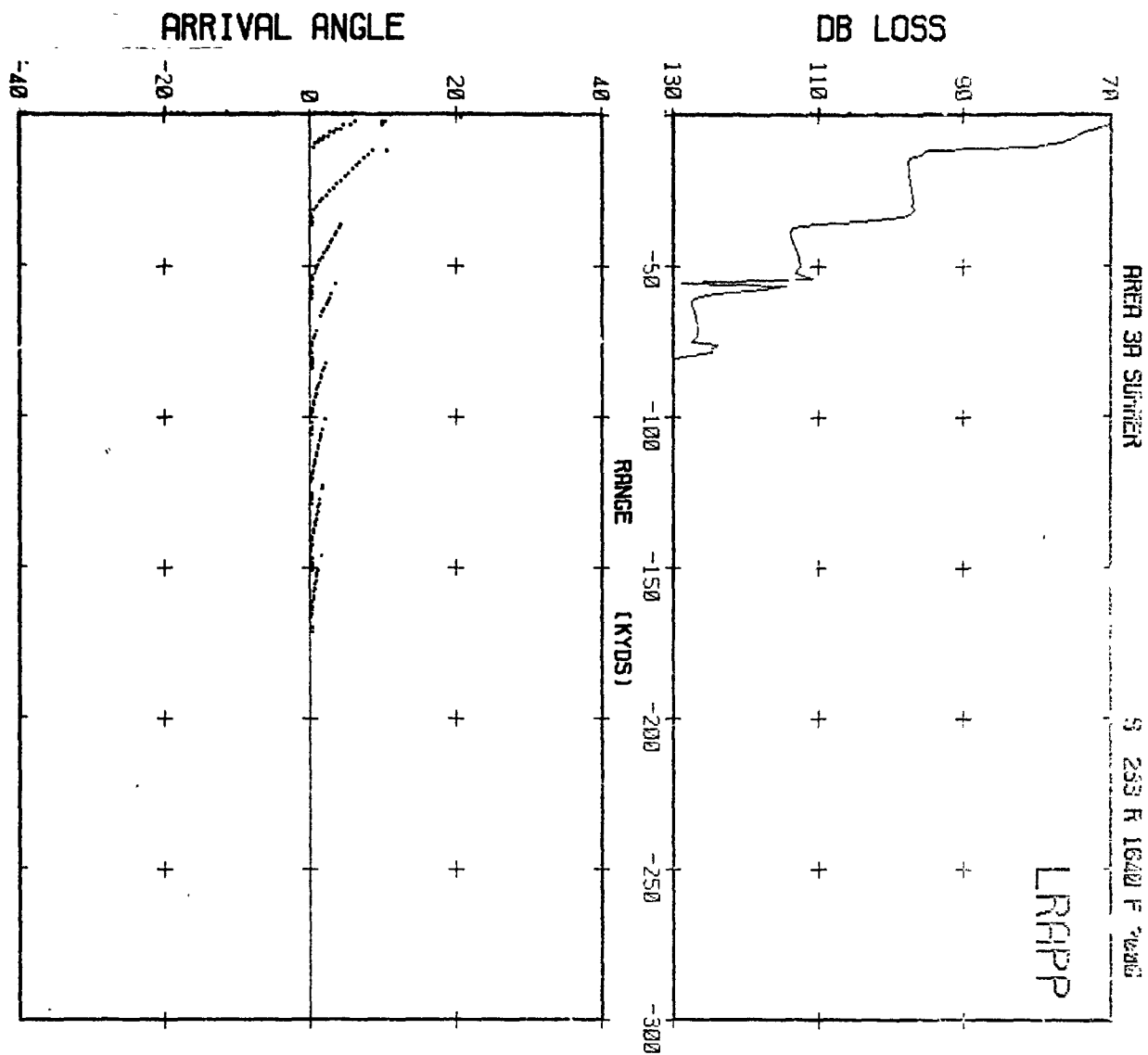
DEPTH IN METERS

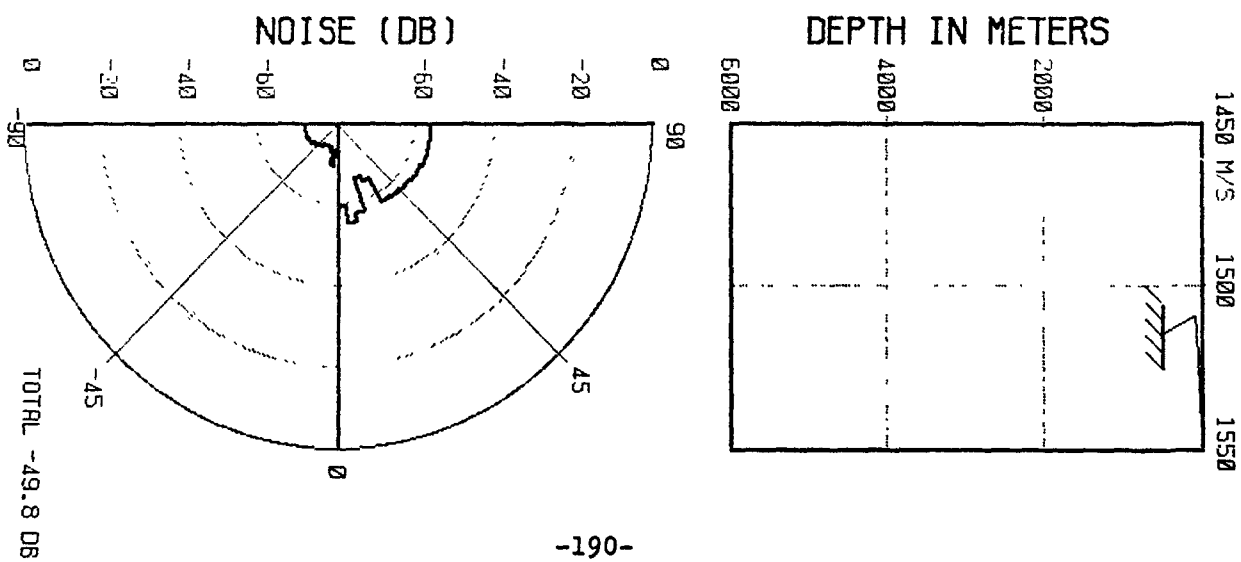
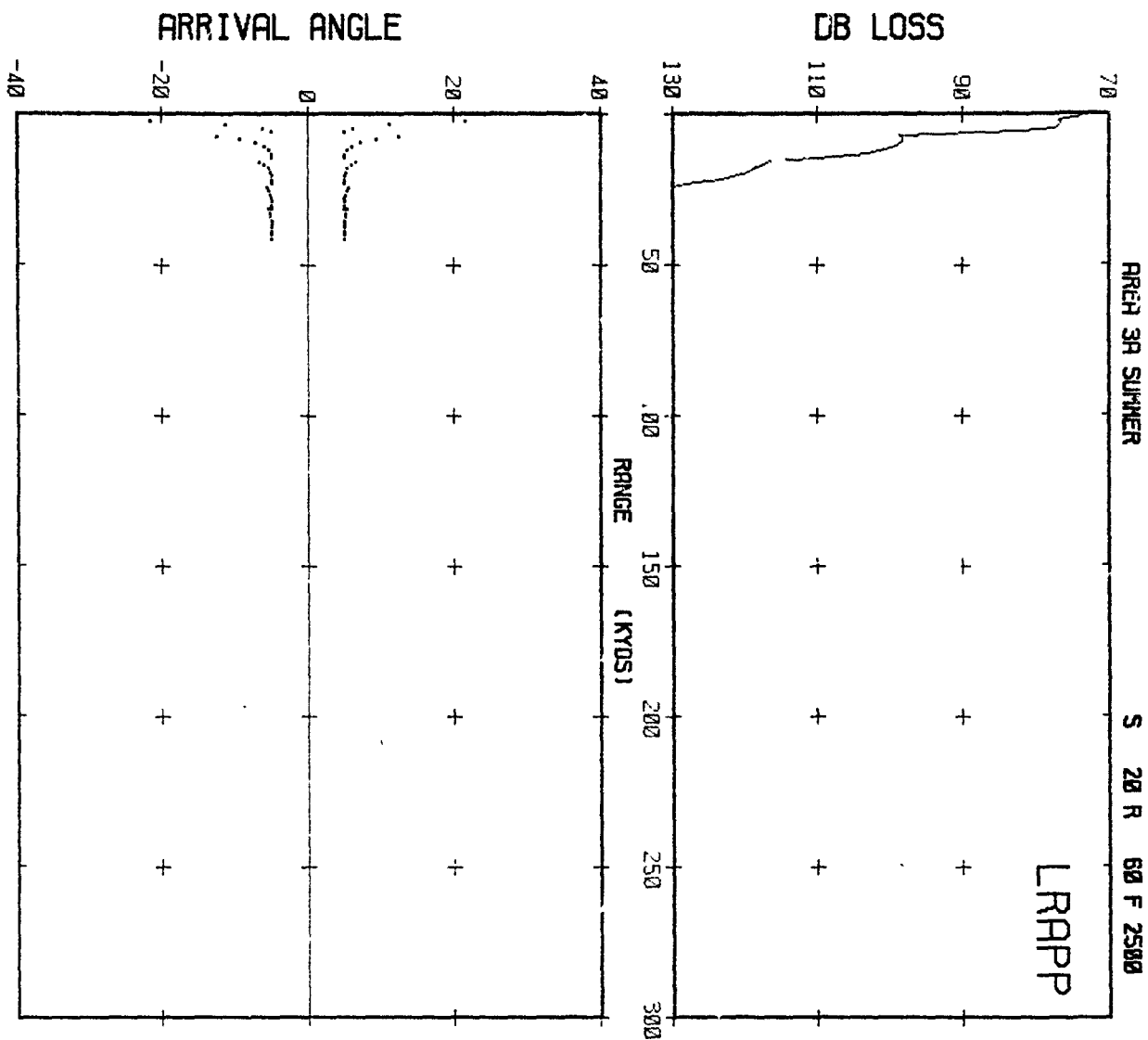


NOISE (DB)







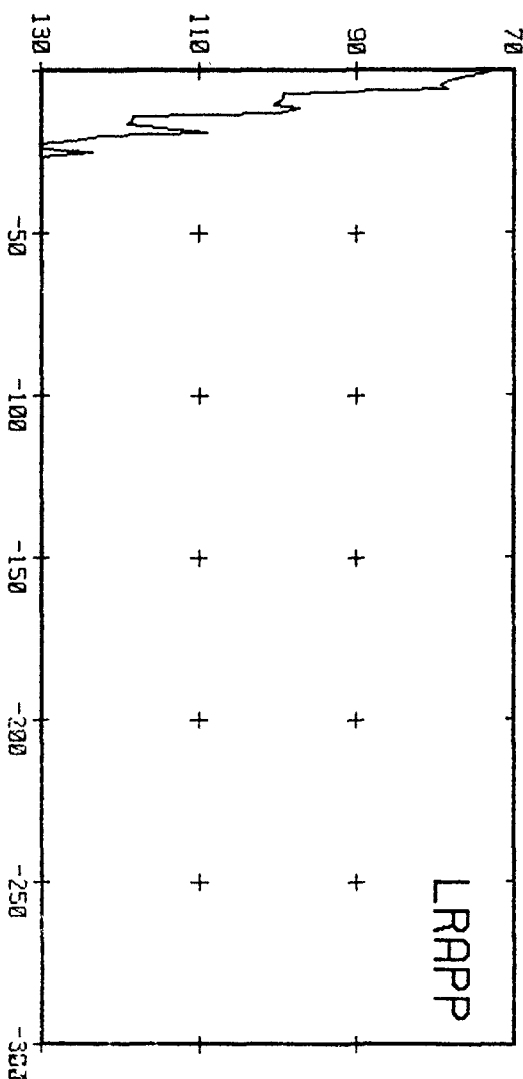


AREA 3A SUMMER

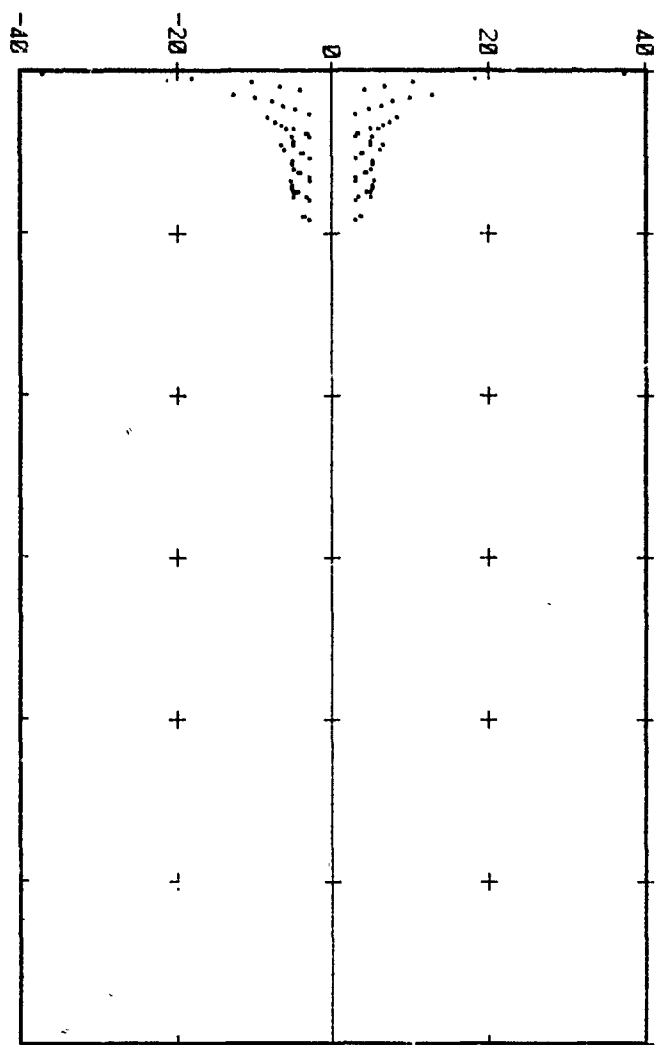
S 50 R 60 F 2500

1450 M/S 1500 1550

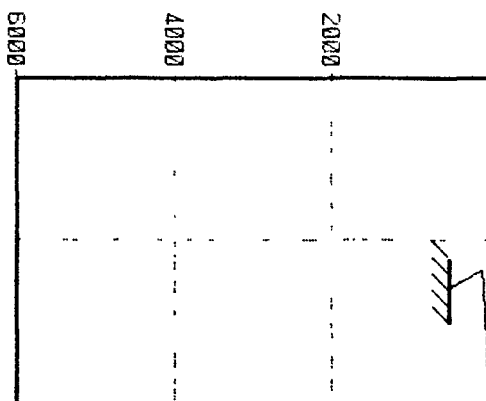
DB LOSS



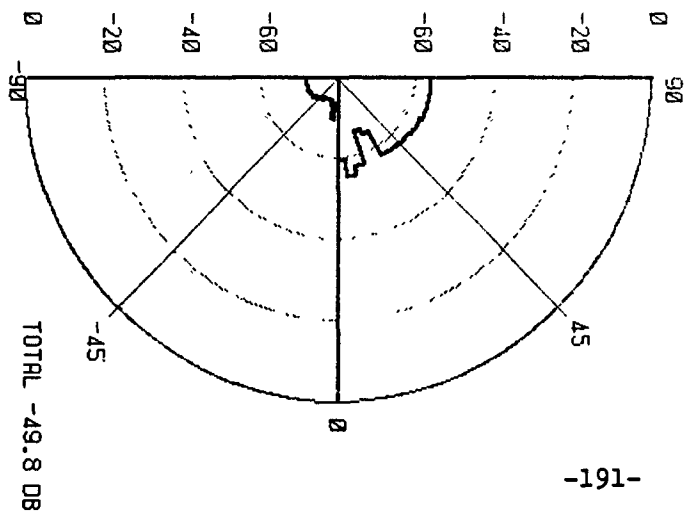
ARRIVAL ANGLE

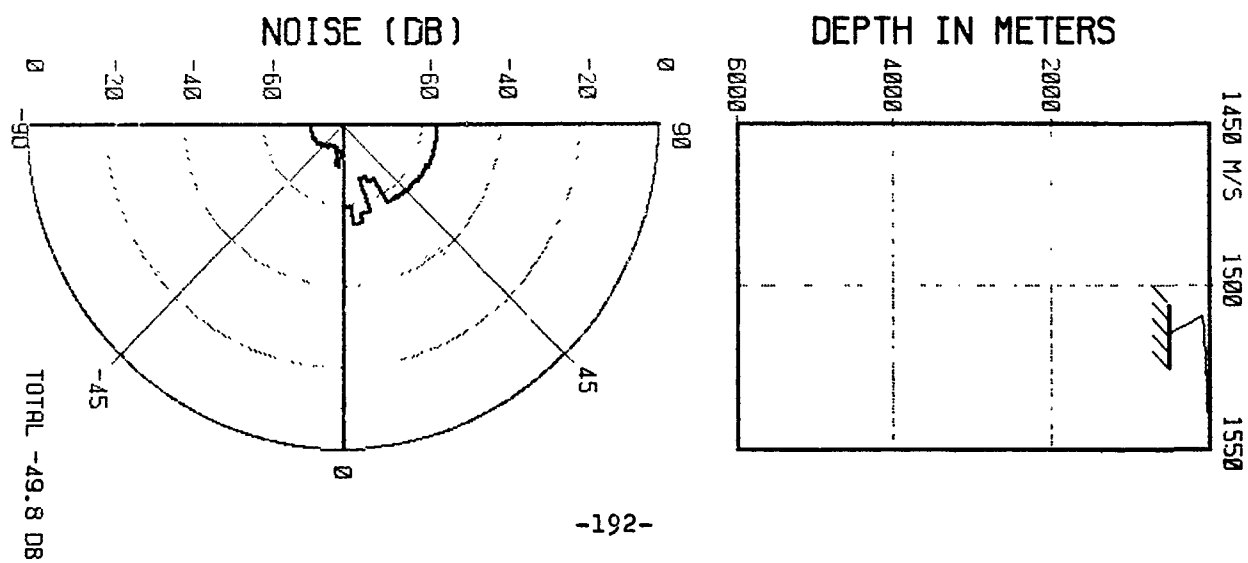
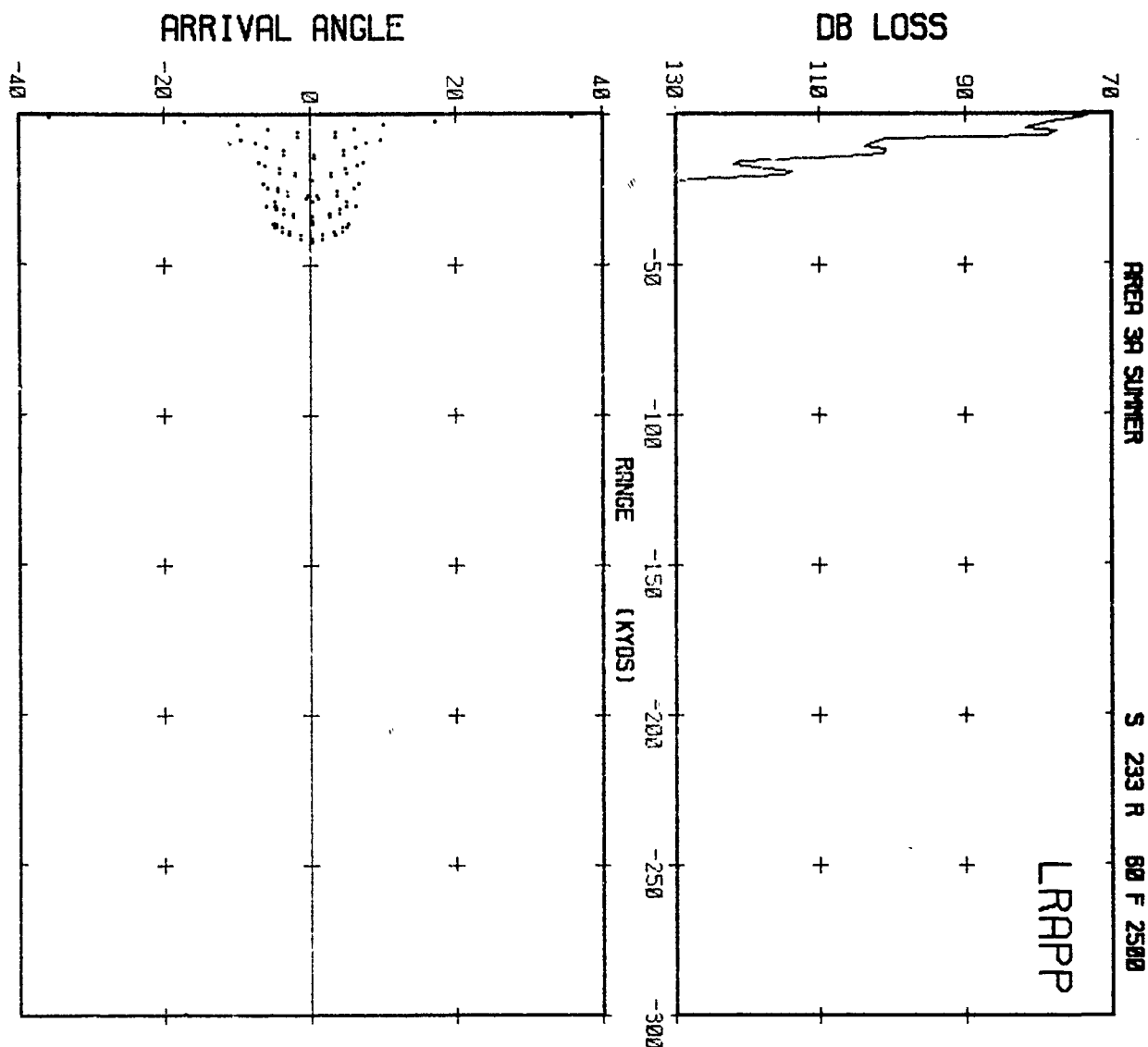


DEPTH IN METERS



NOISE (DB)



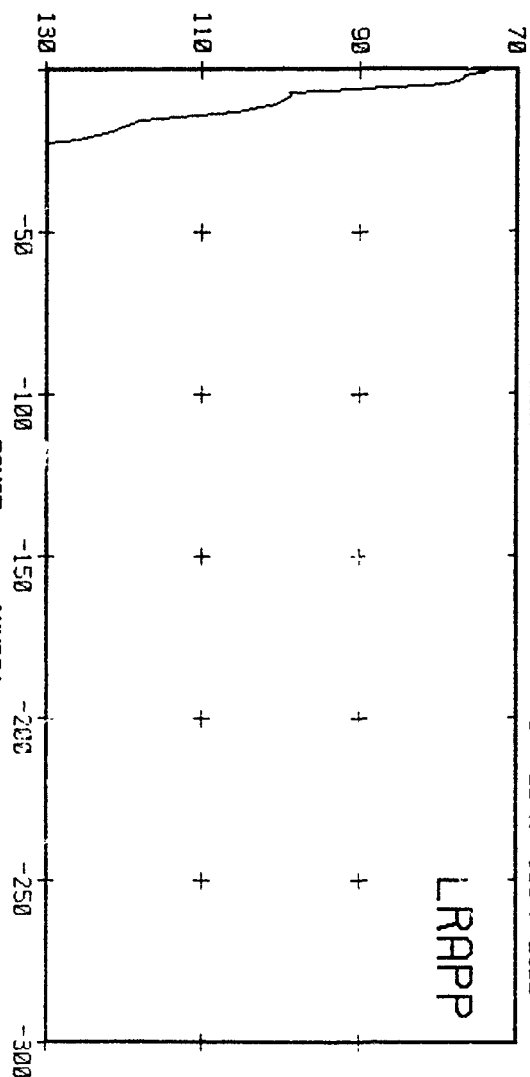


RRR 3R SUMMER

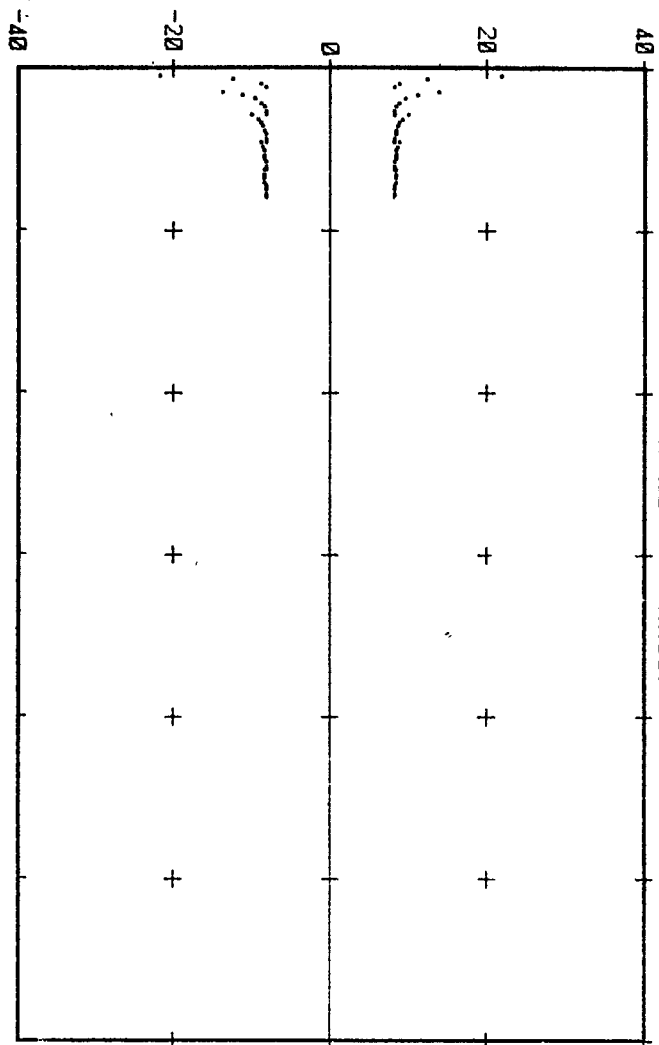
S 20 R 133 F 2500

LRAPP

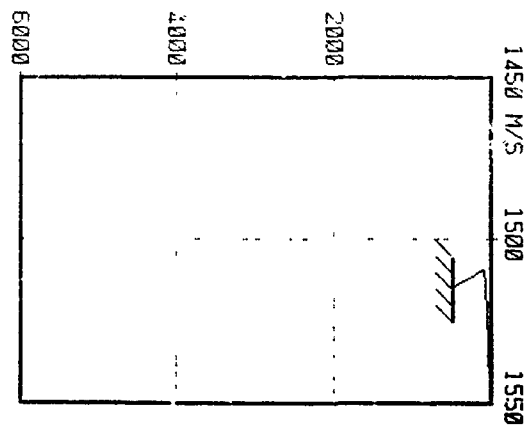
DB LOSS



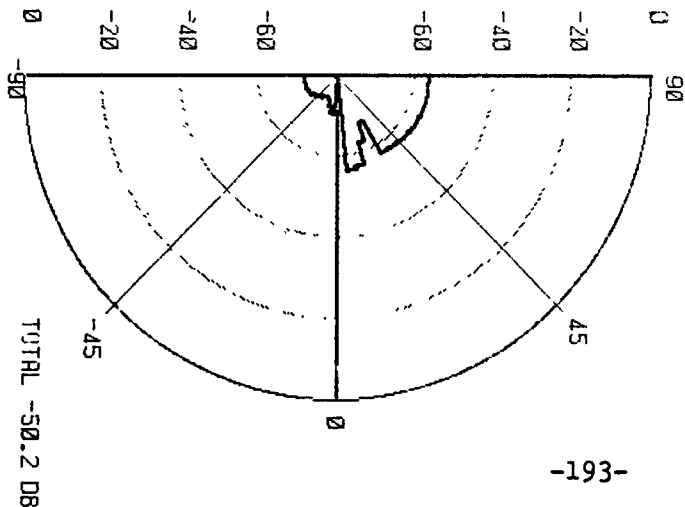
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

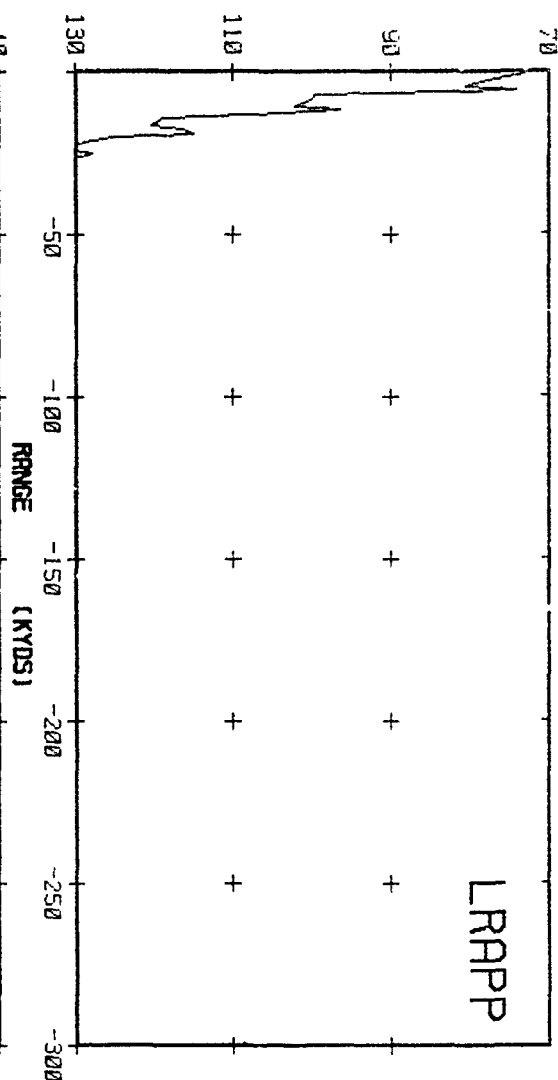


AREA SR SUMMER

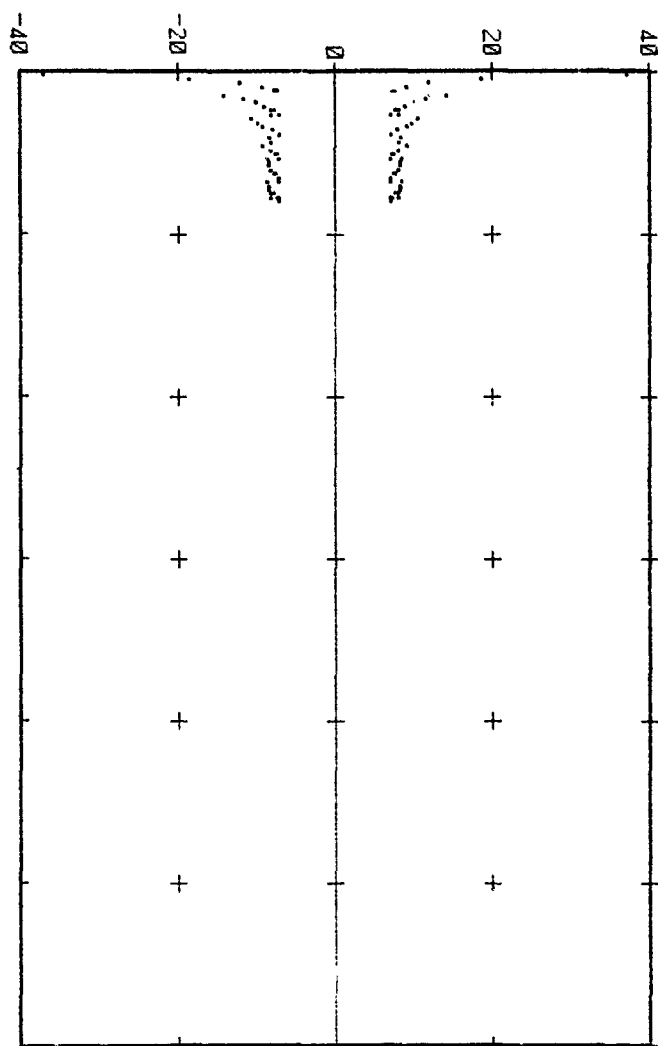
S 50 R 133 F 2500

1450 M/S 1500 1550

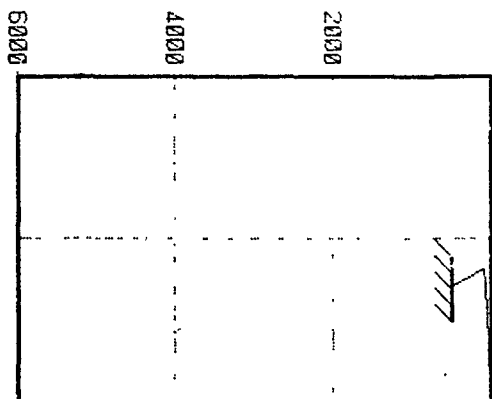
DB LOSS



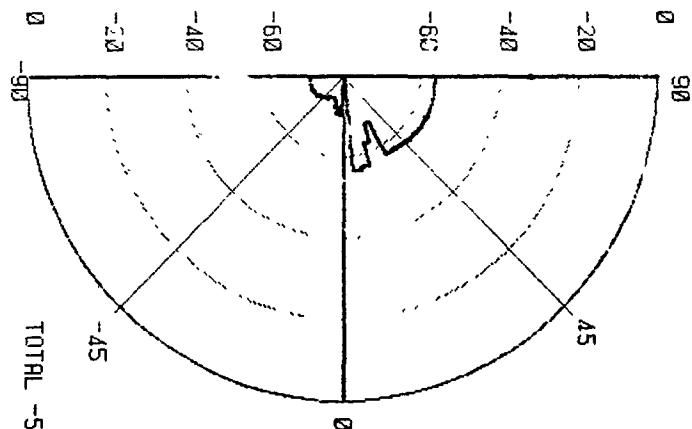
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

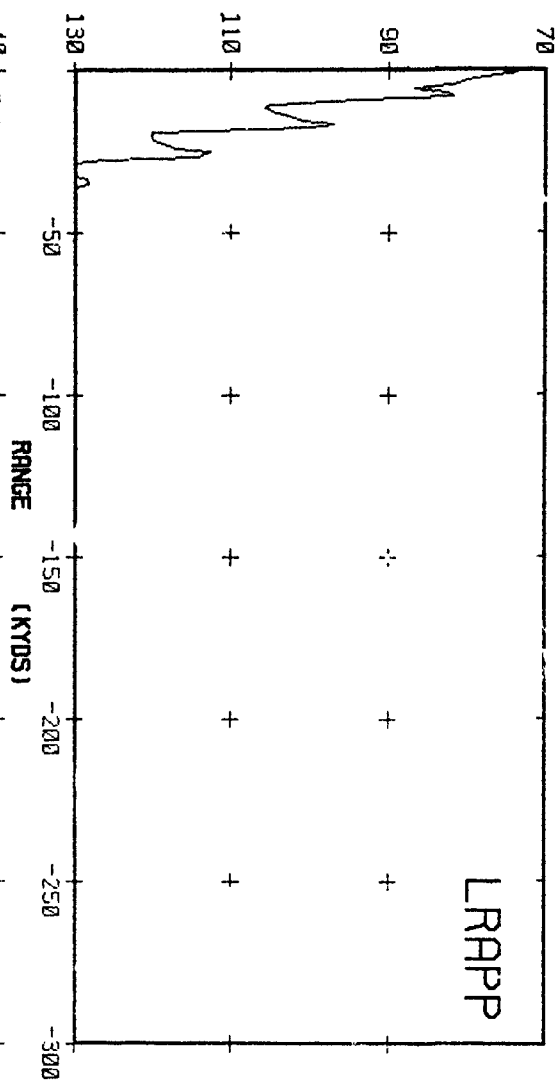


ARRR 3R SUMMER

S 233 R 133 F 2500

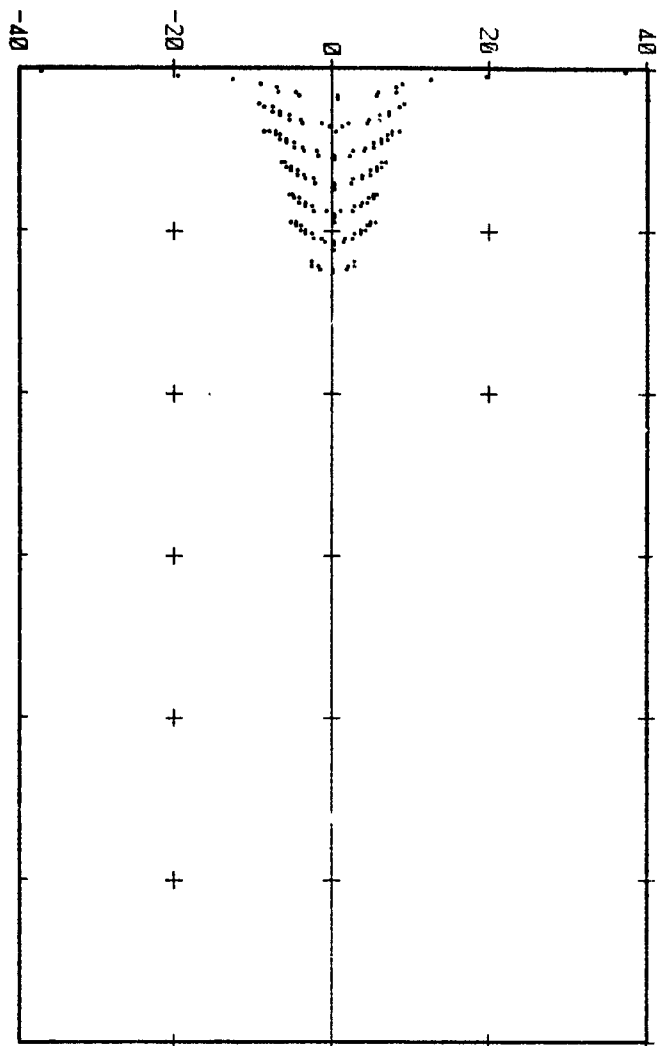
1450 M/S 1500 1550

DB LOSS

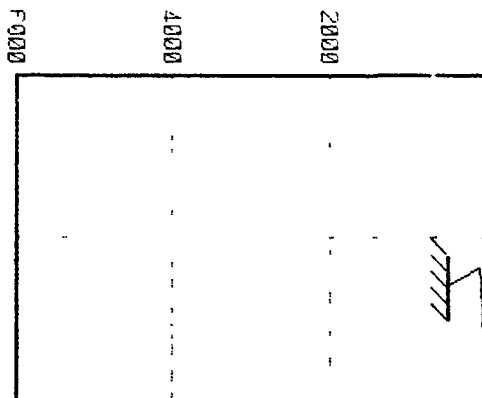


LRAPP

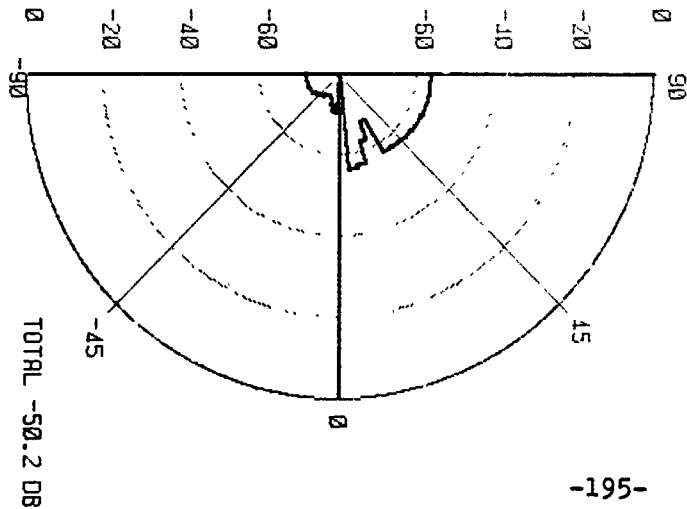
ARRIVAL ANGLE



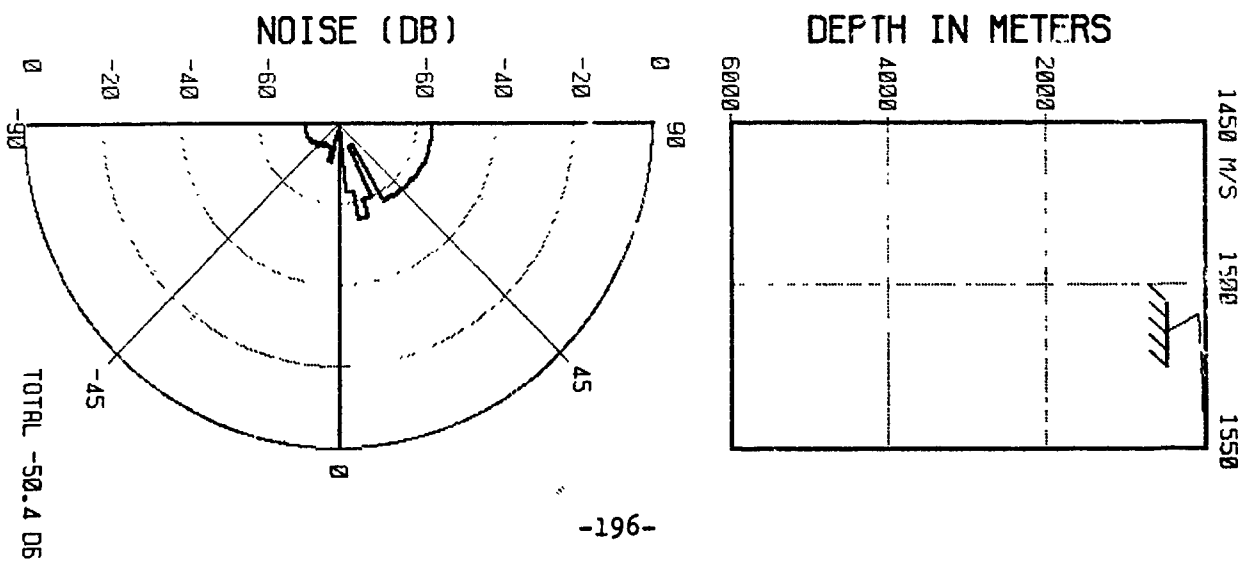
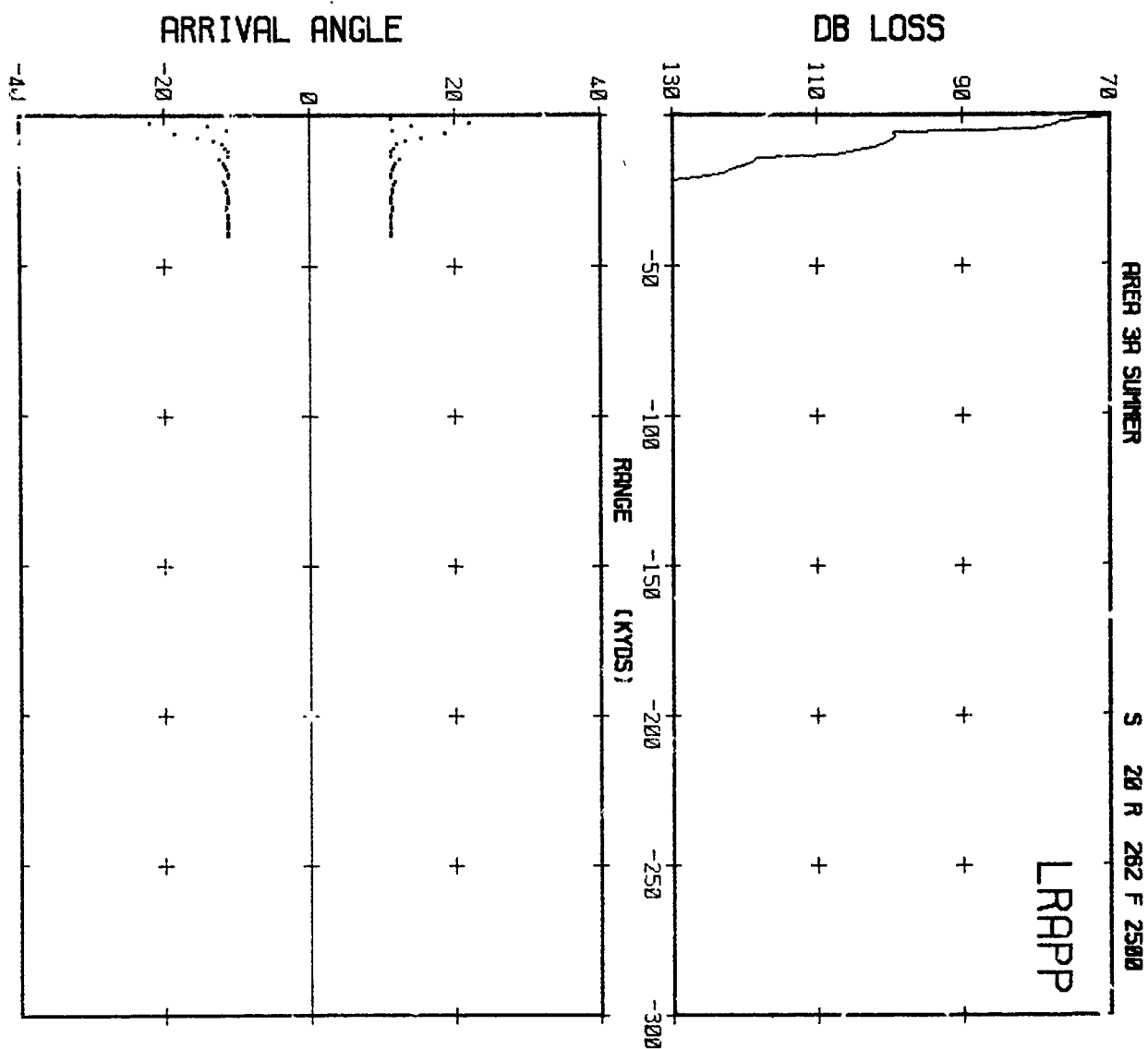
DEPTH IN METERS

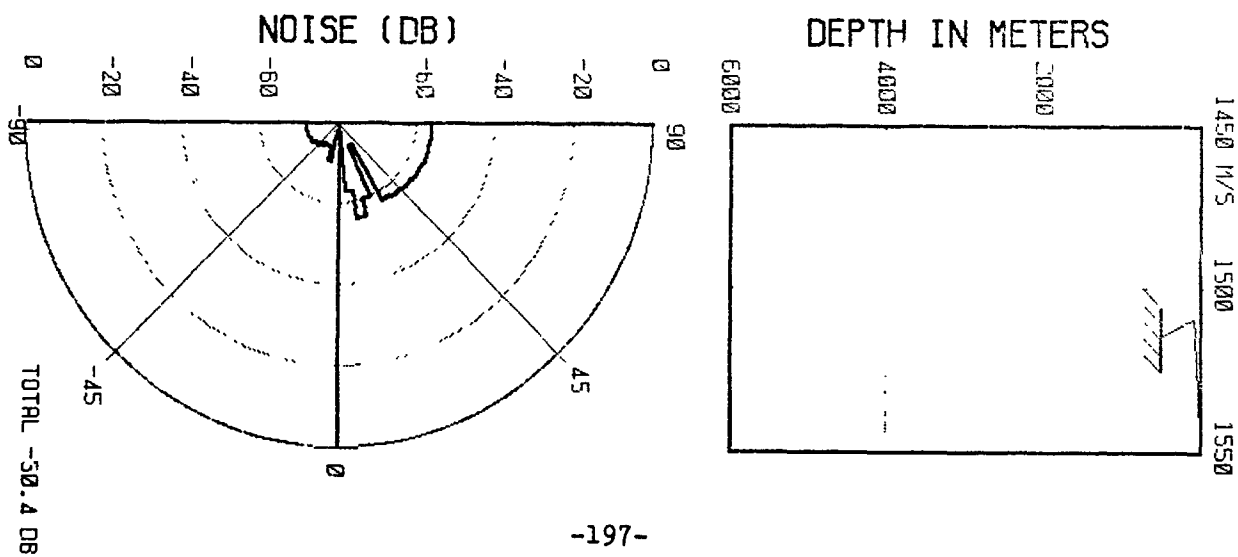
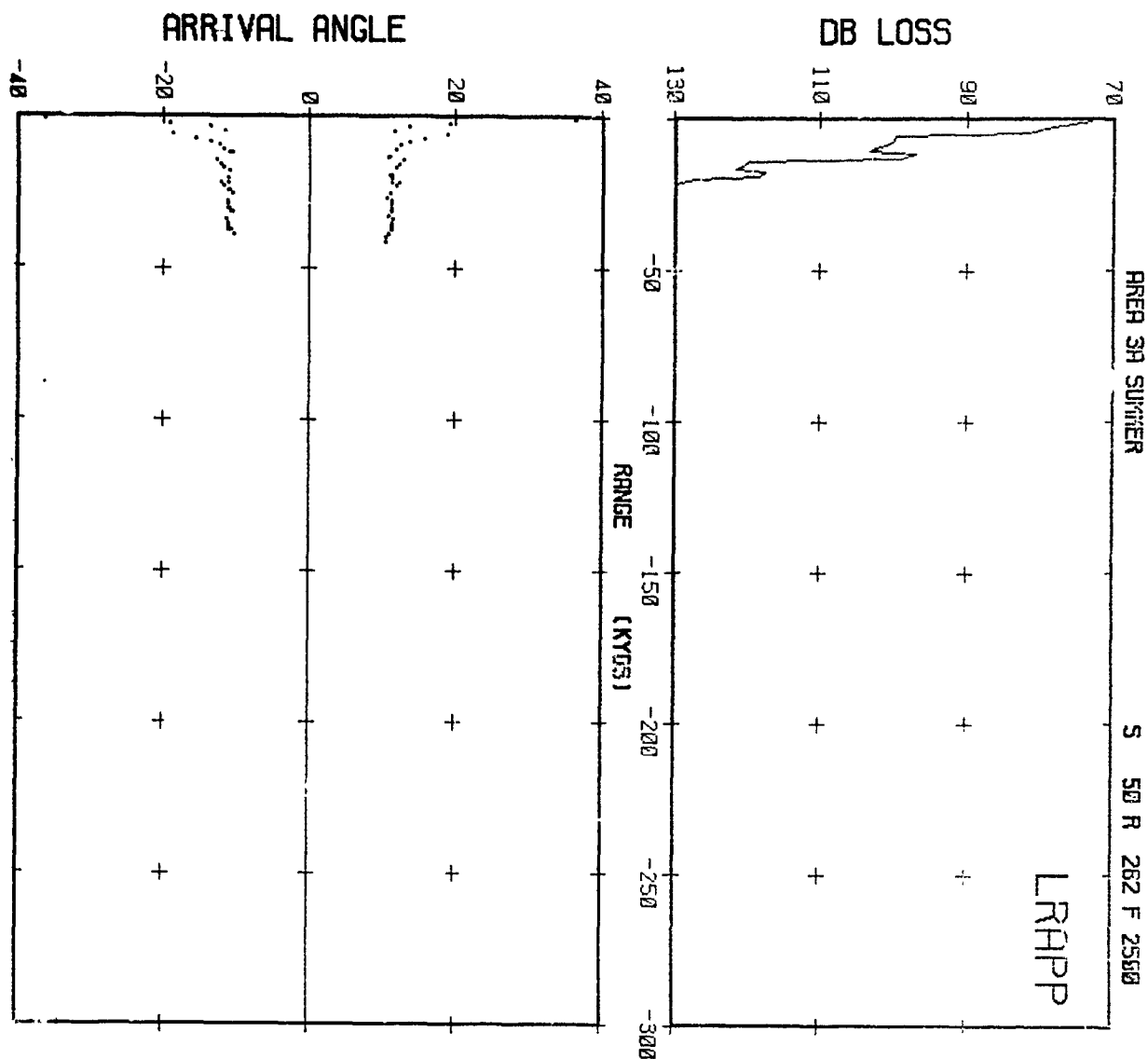


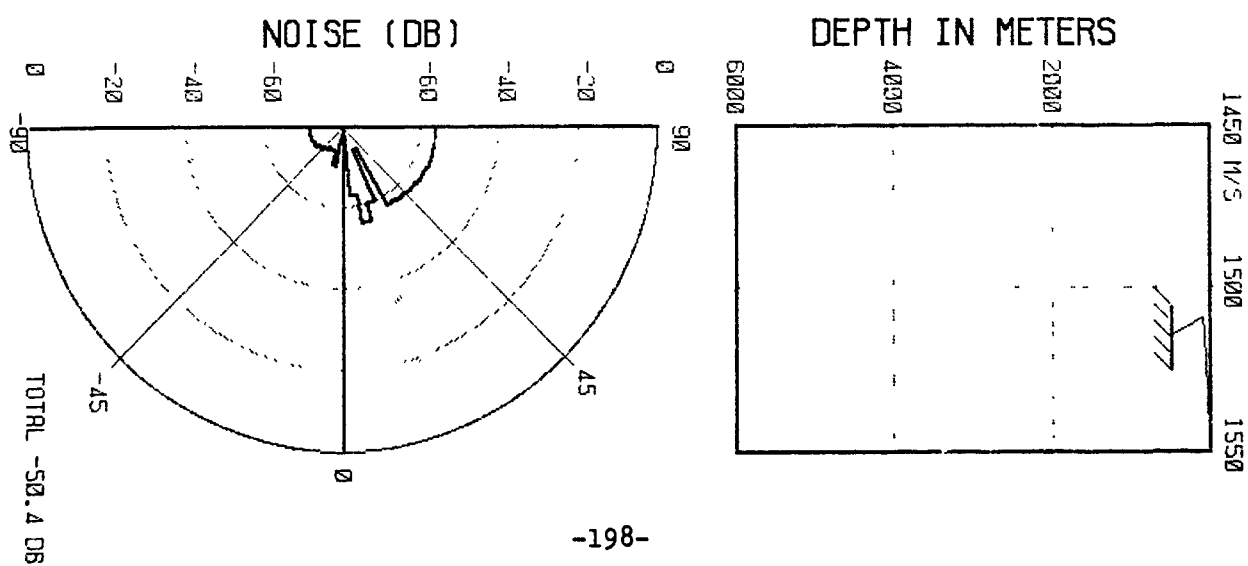
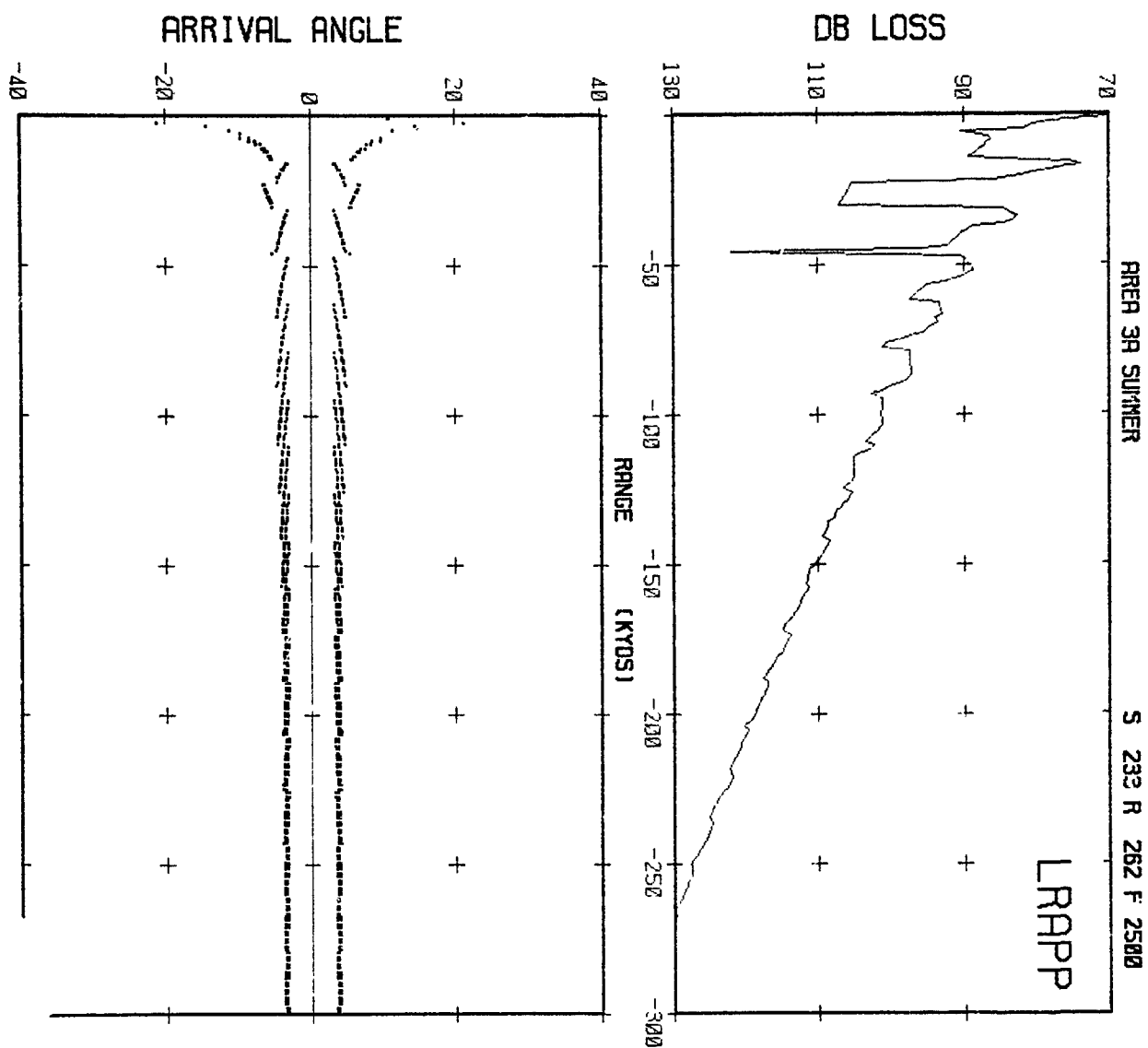
NOISE (DB)

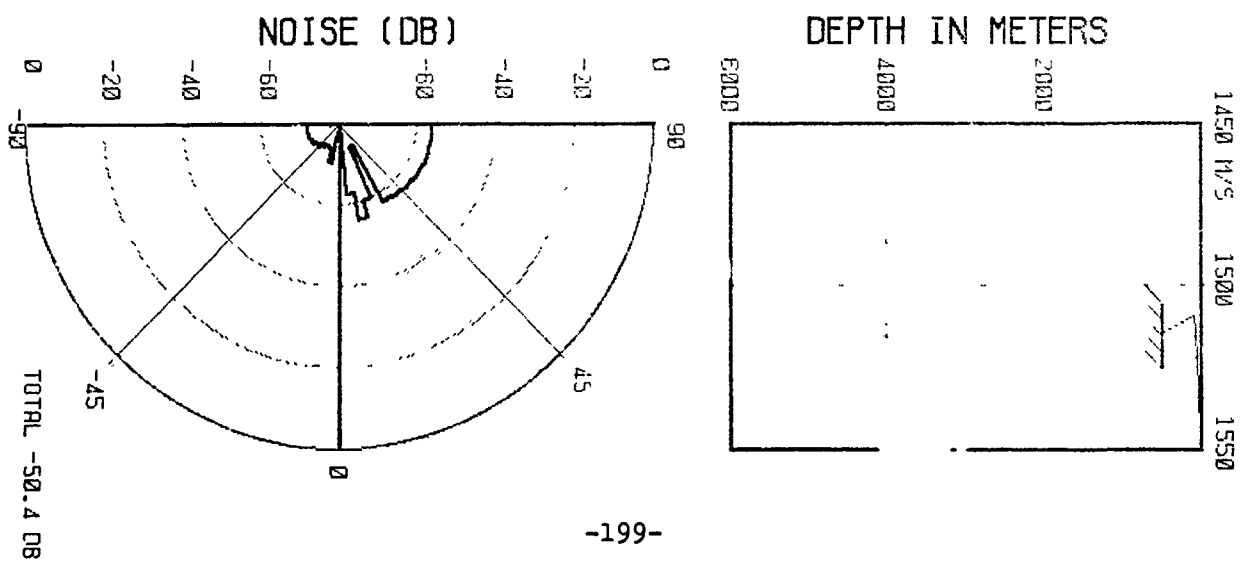
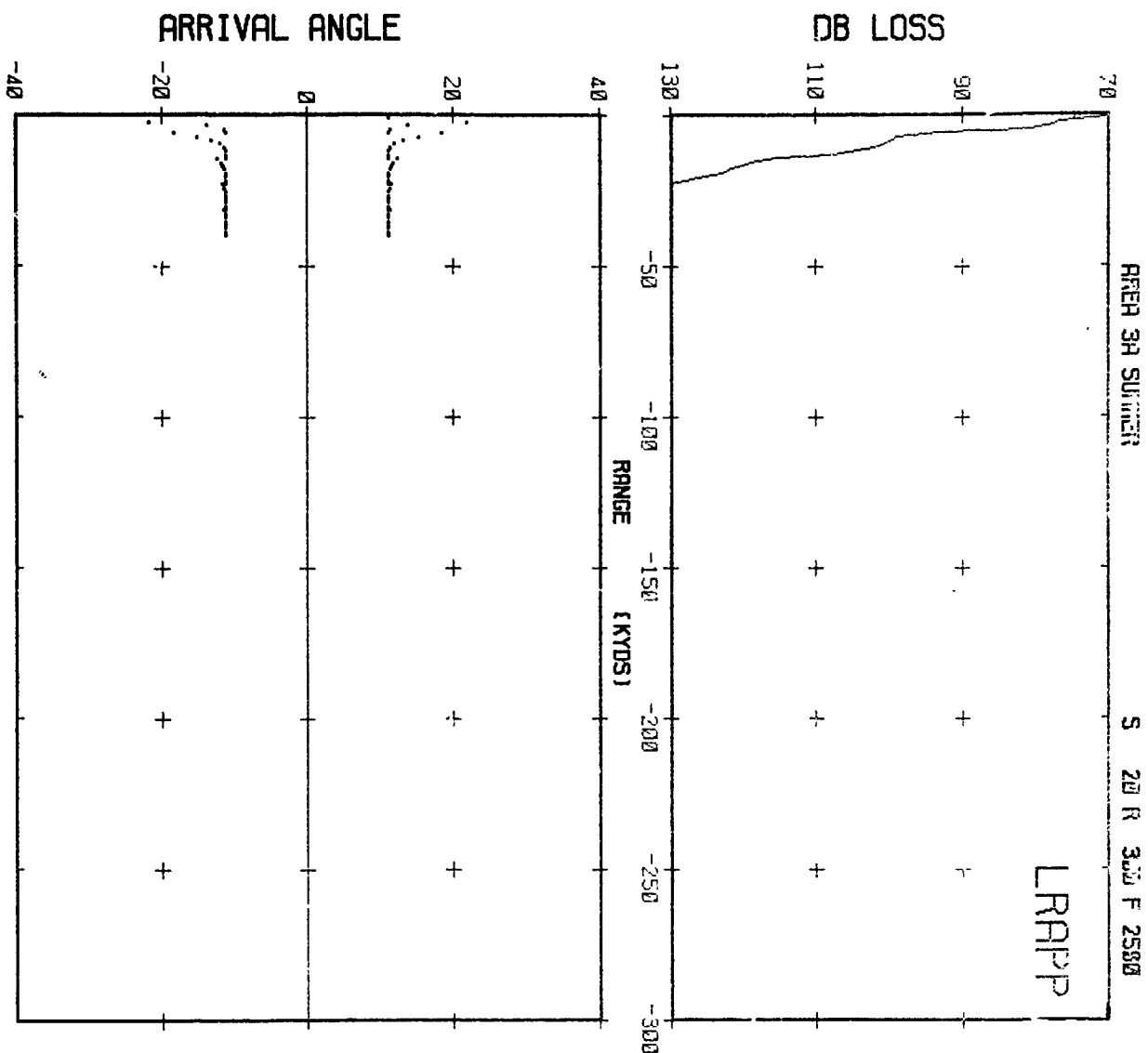


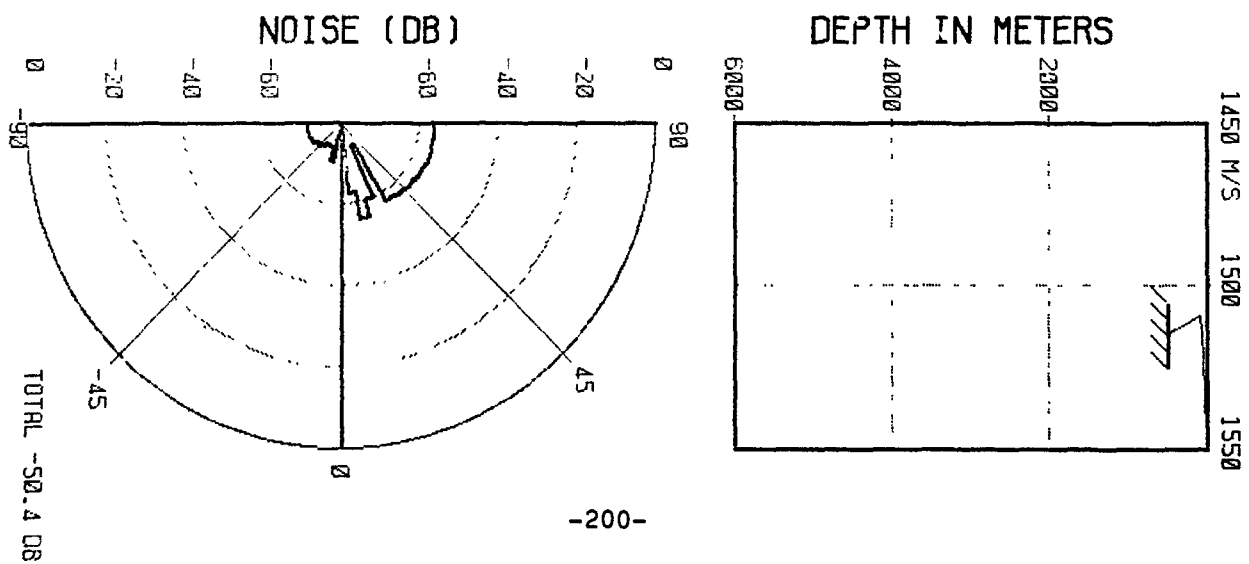
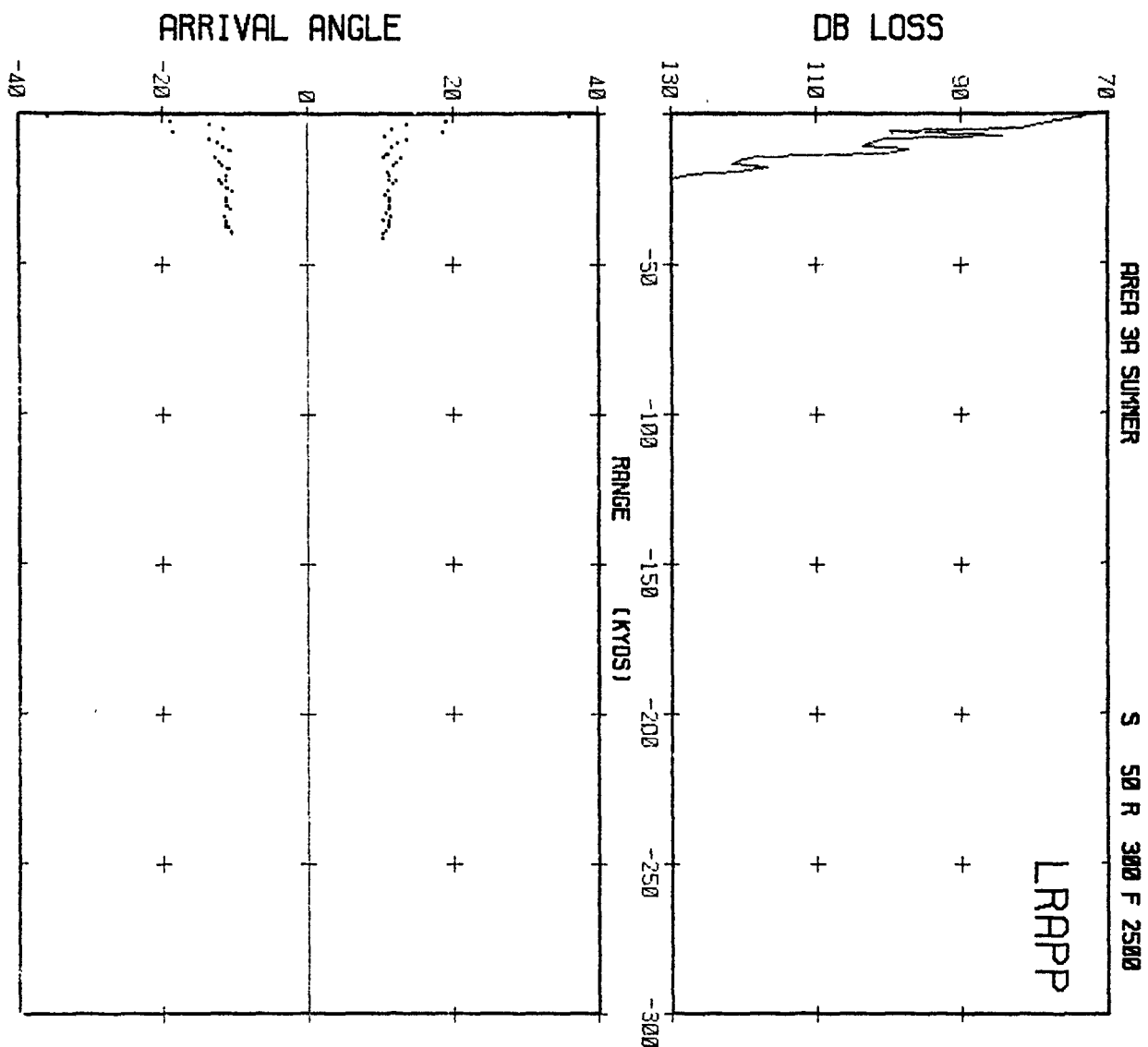
TOTAL -50.2 DB









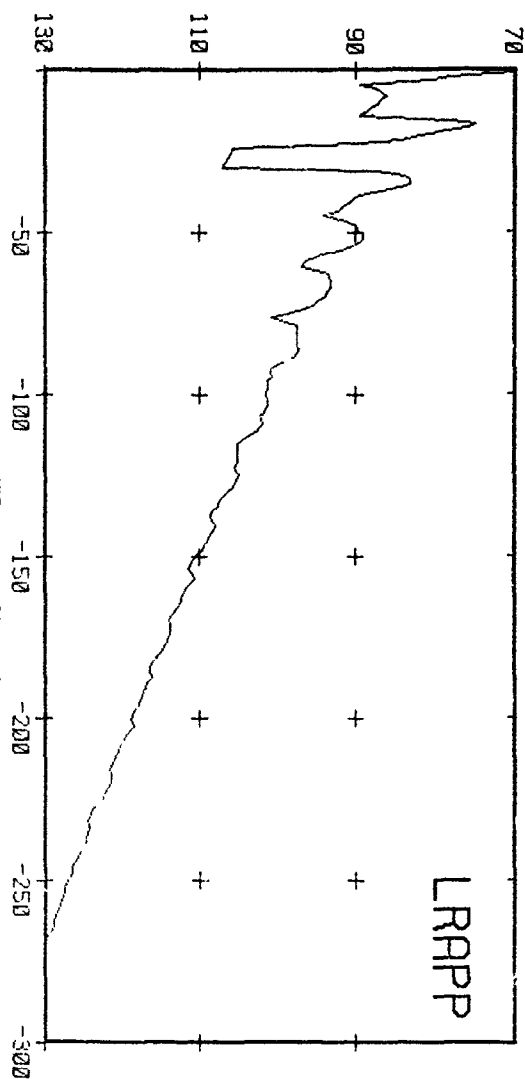


AREA 3A SUMMER

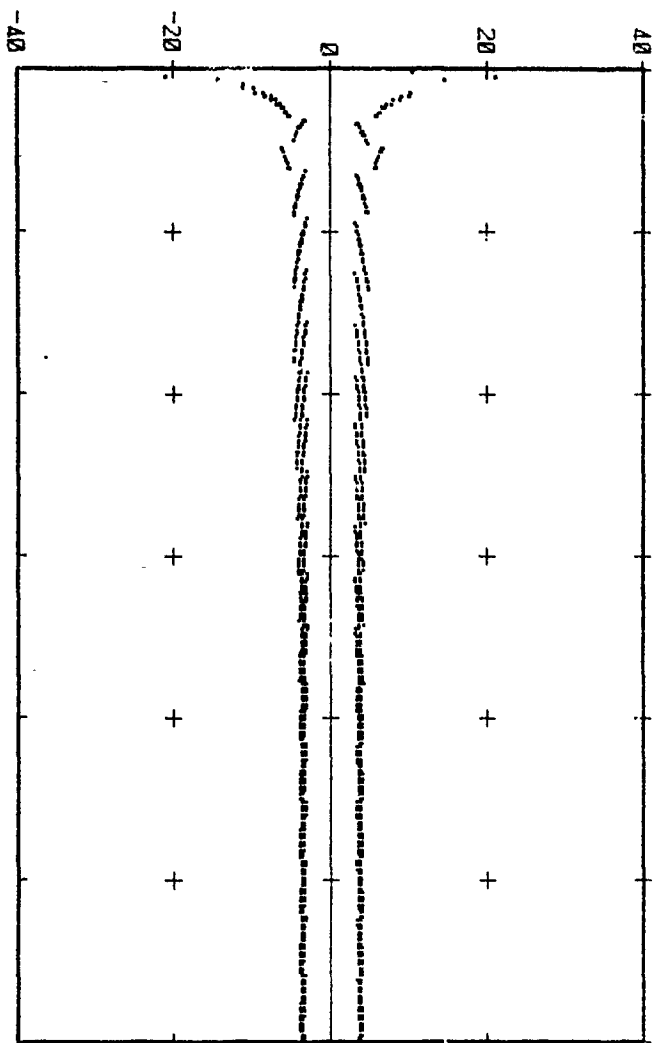
S 233 R 300 F 2500

1450 M/S 1500 1550

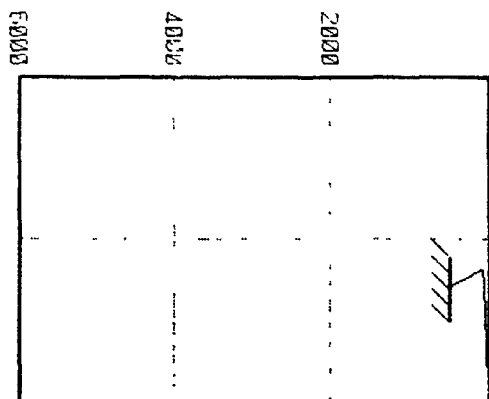
DB LOSS



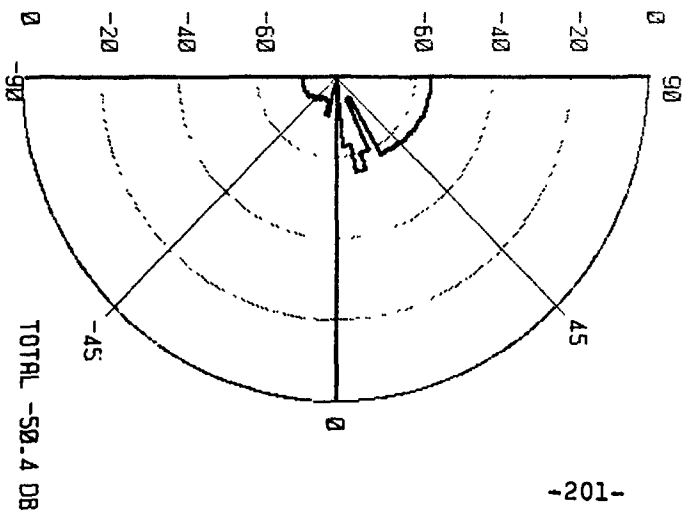
ARRIVAL ANGLE

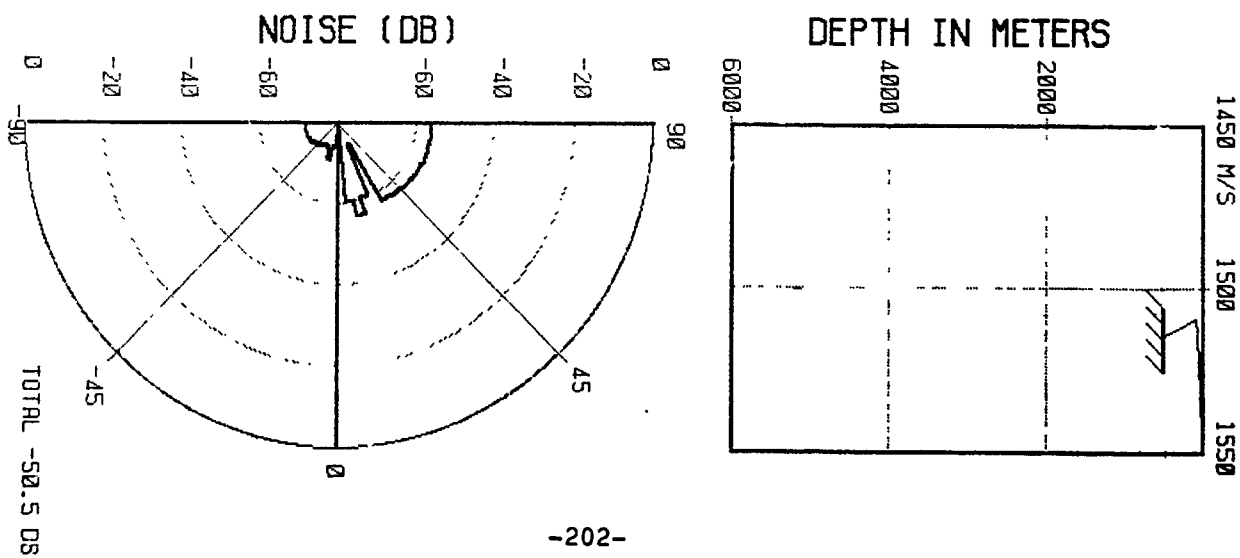
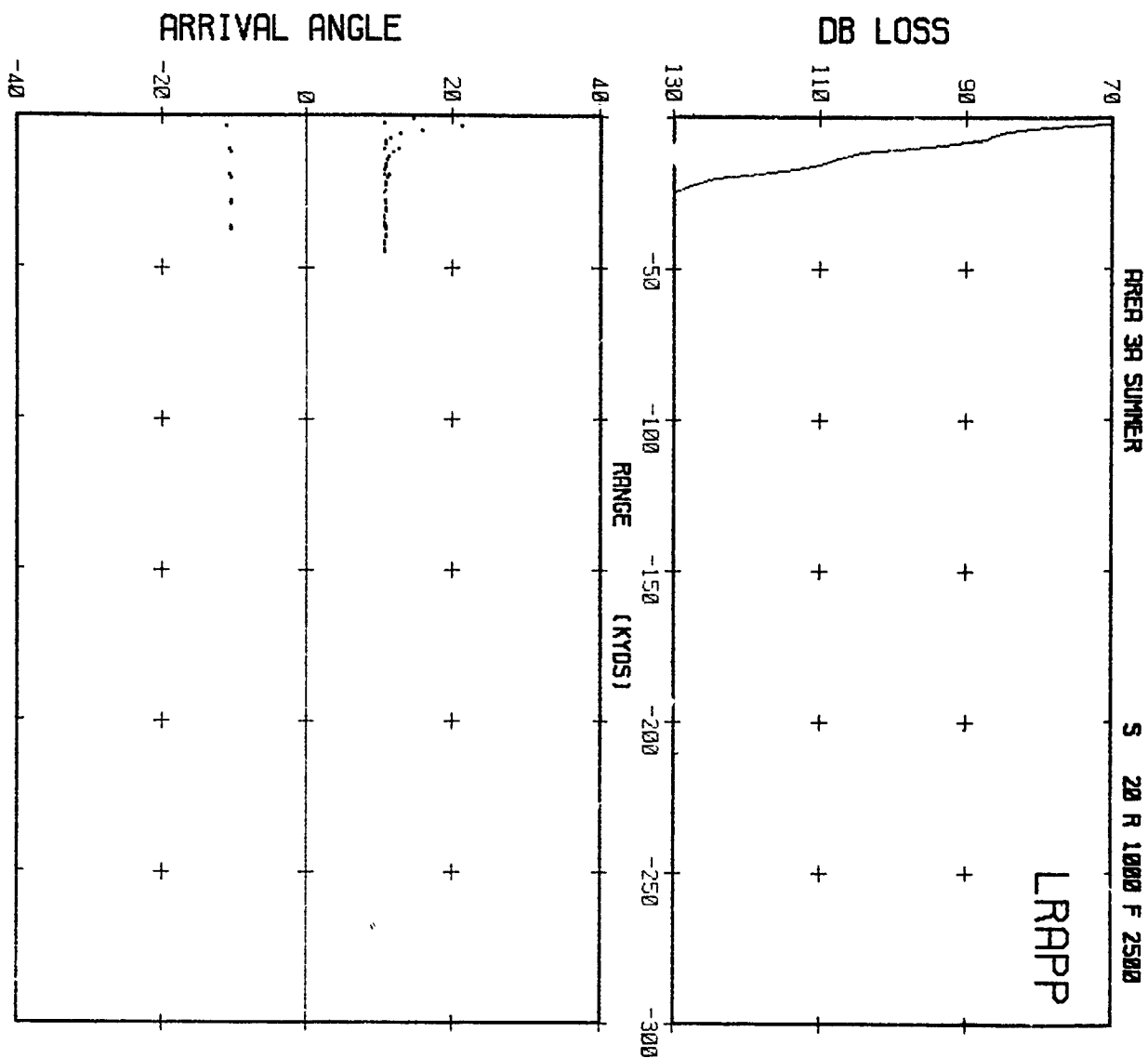


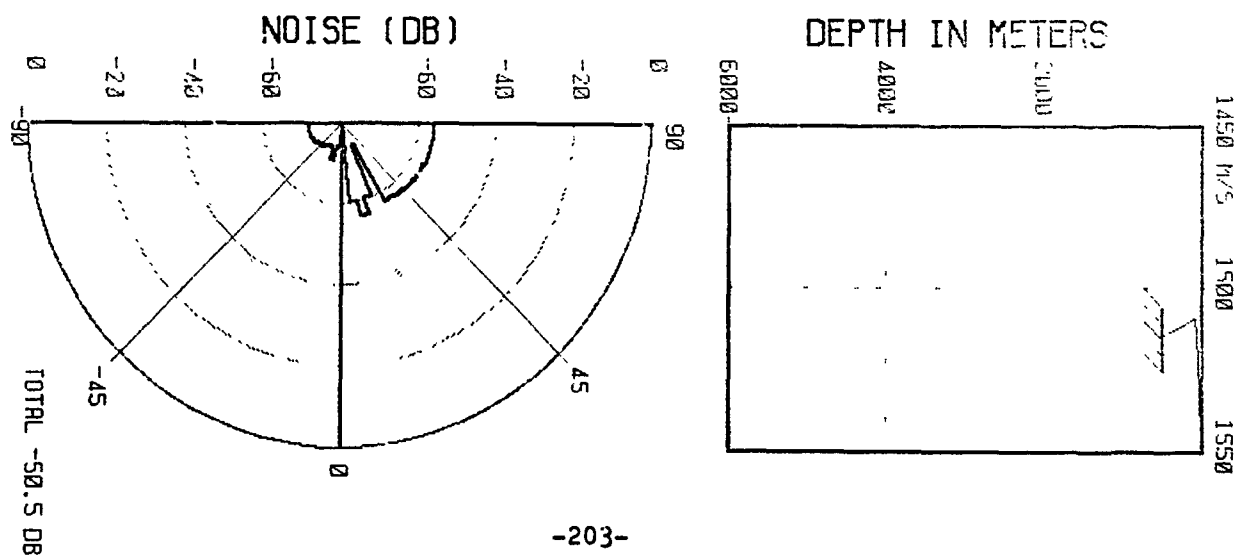
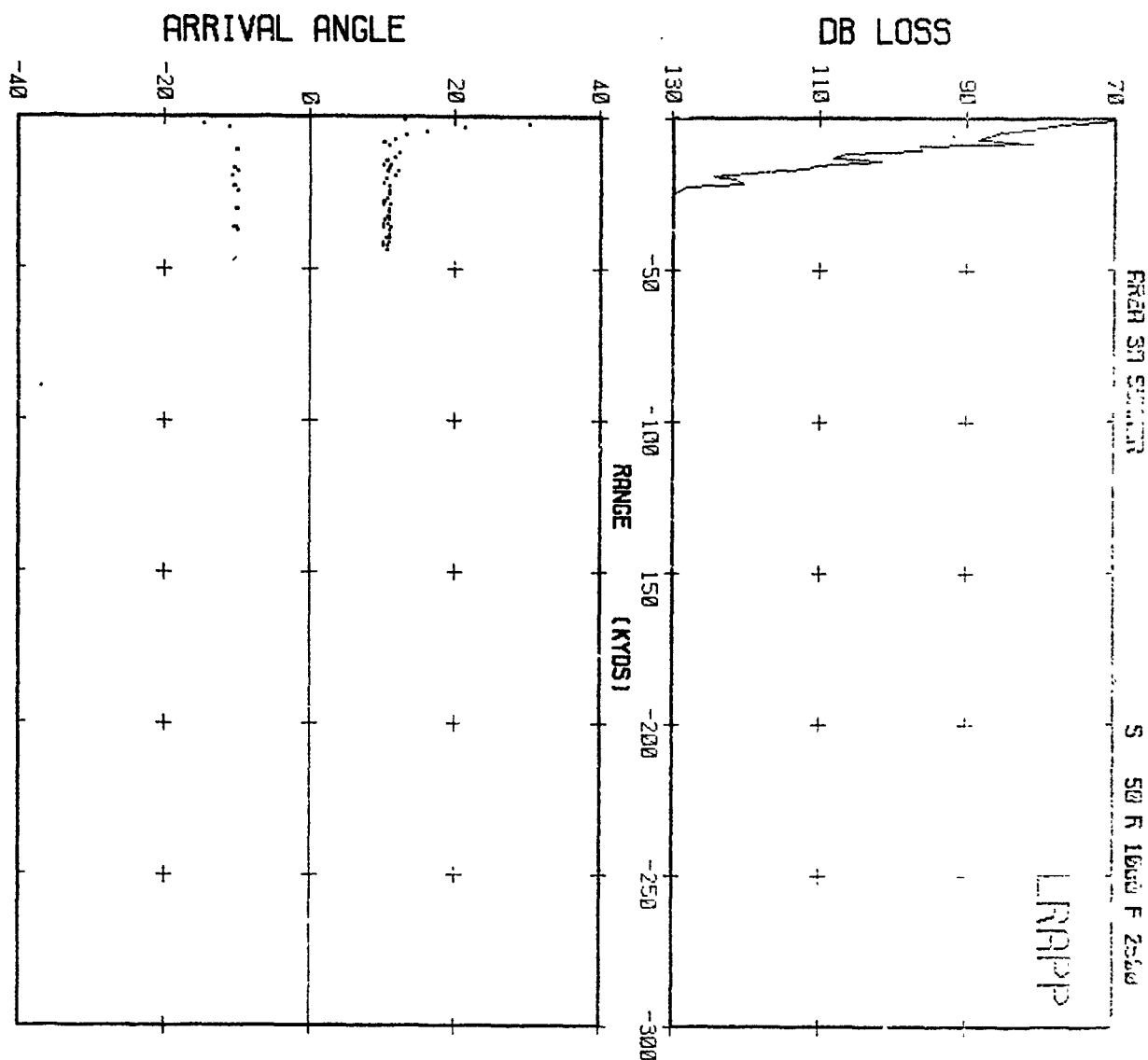
DEPTH IN METERS

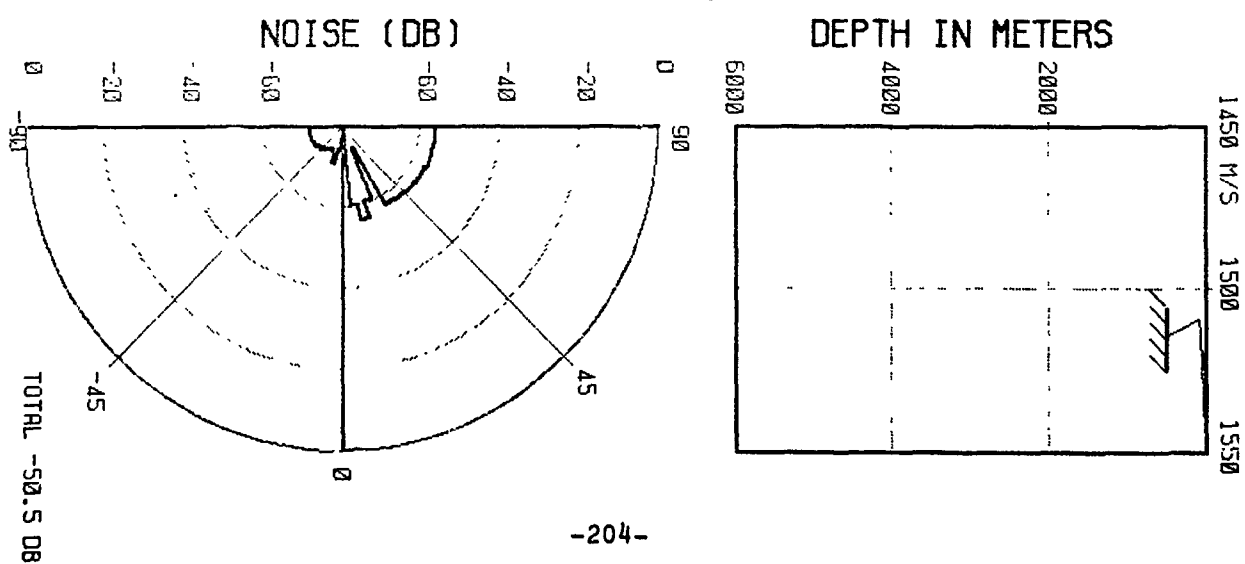
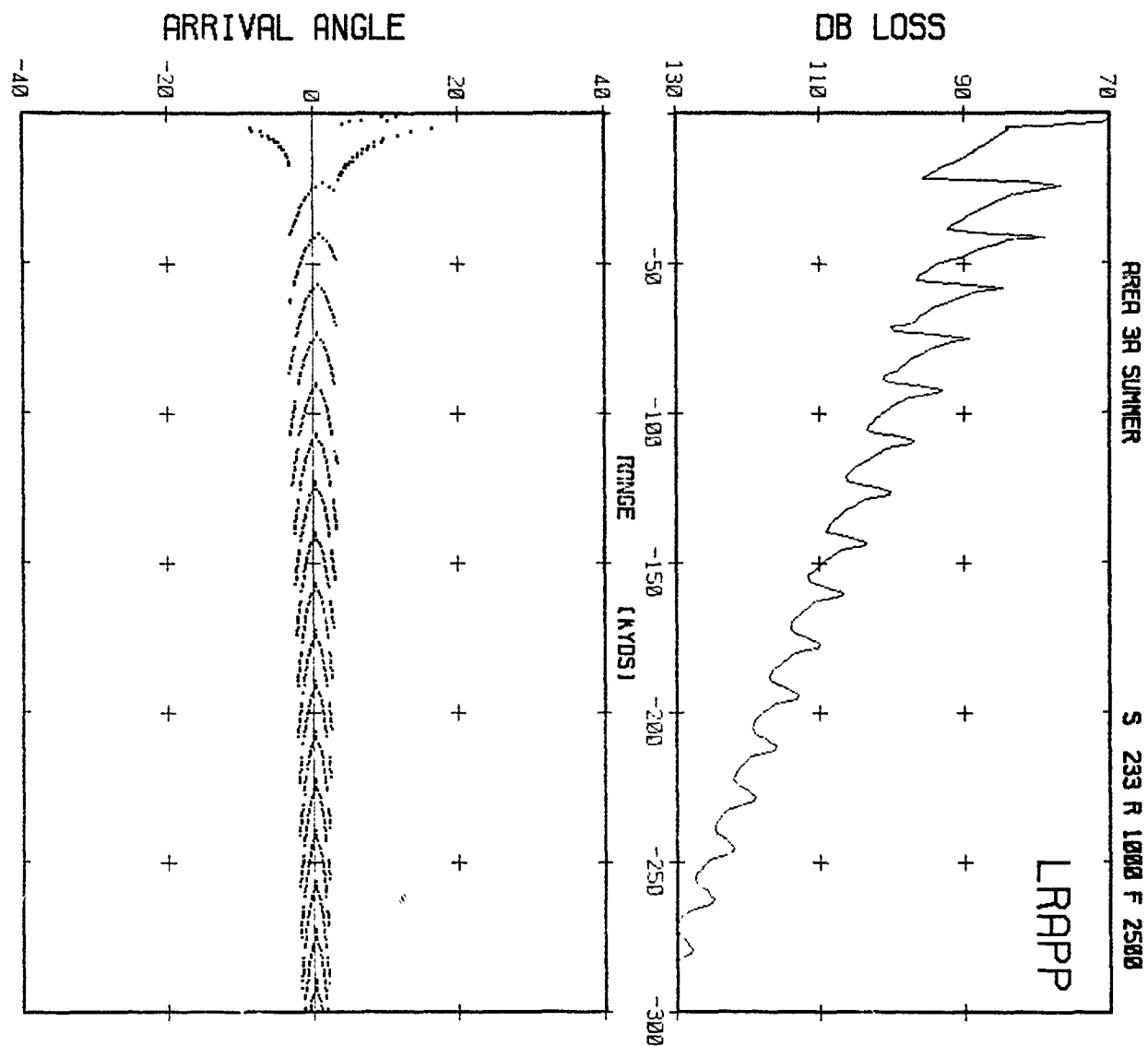


NOISE (DB)









AREA 3A SUMMER

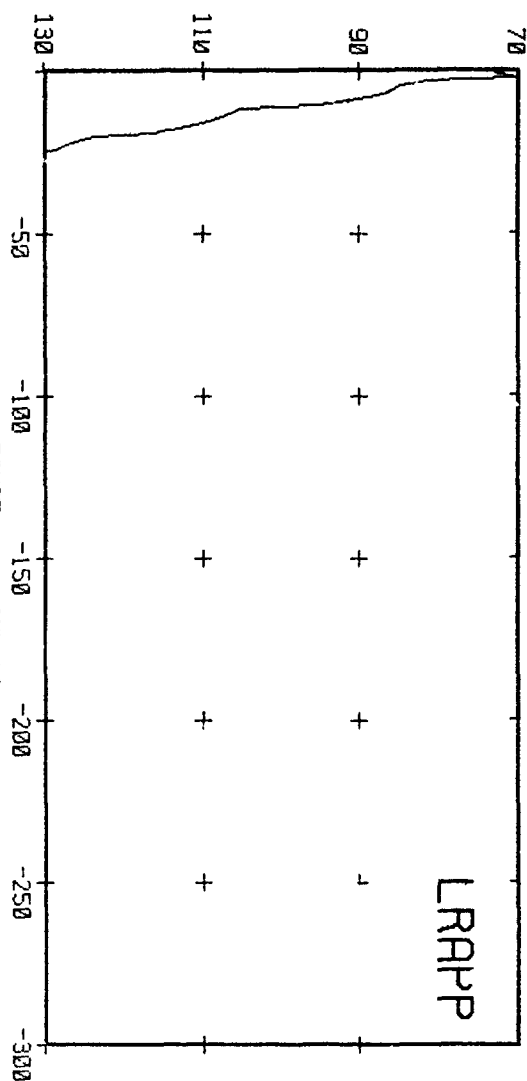
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1450 M/S

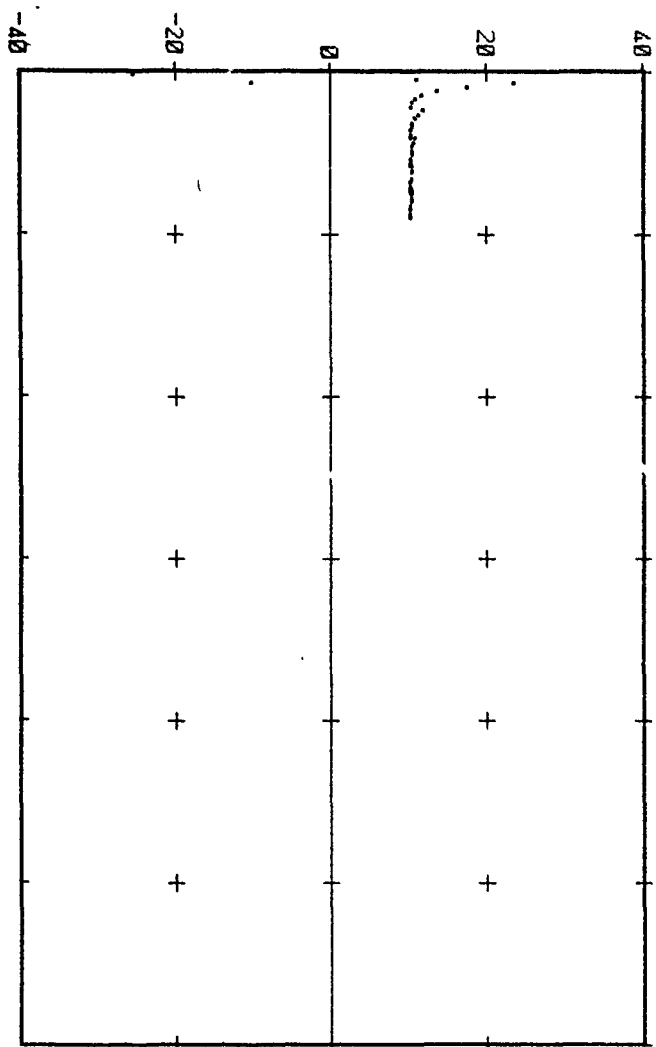
1500

1550

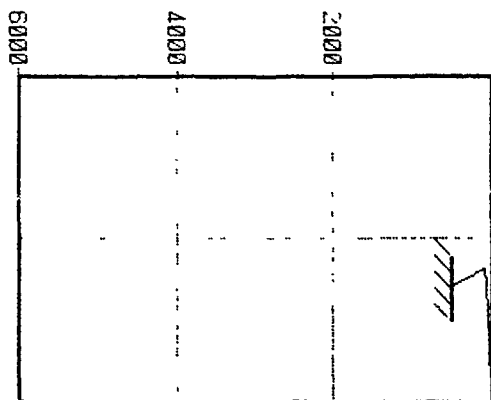
DB LOSS



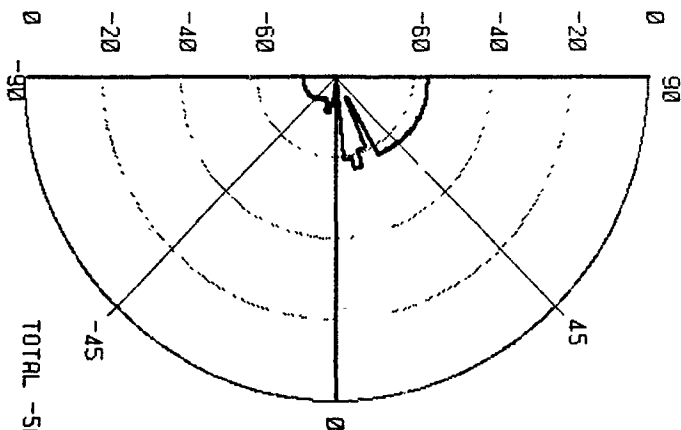
ARRIVAL ANGLE

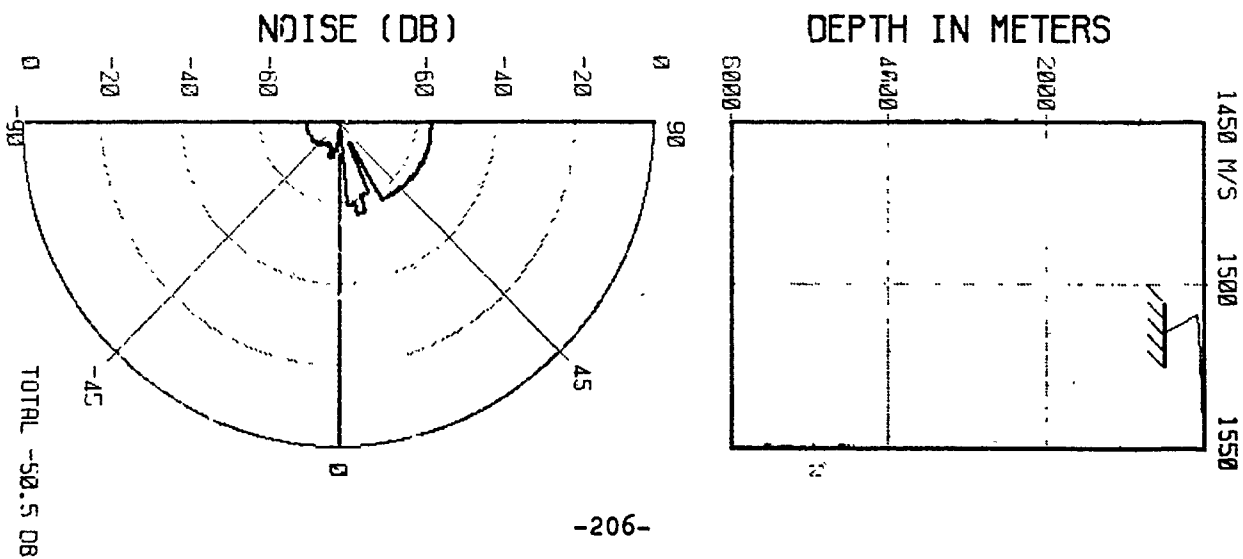
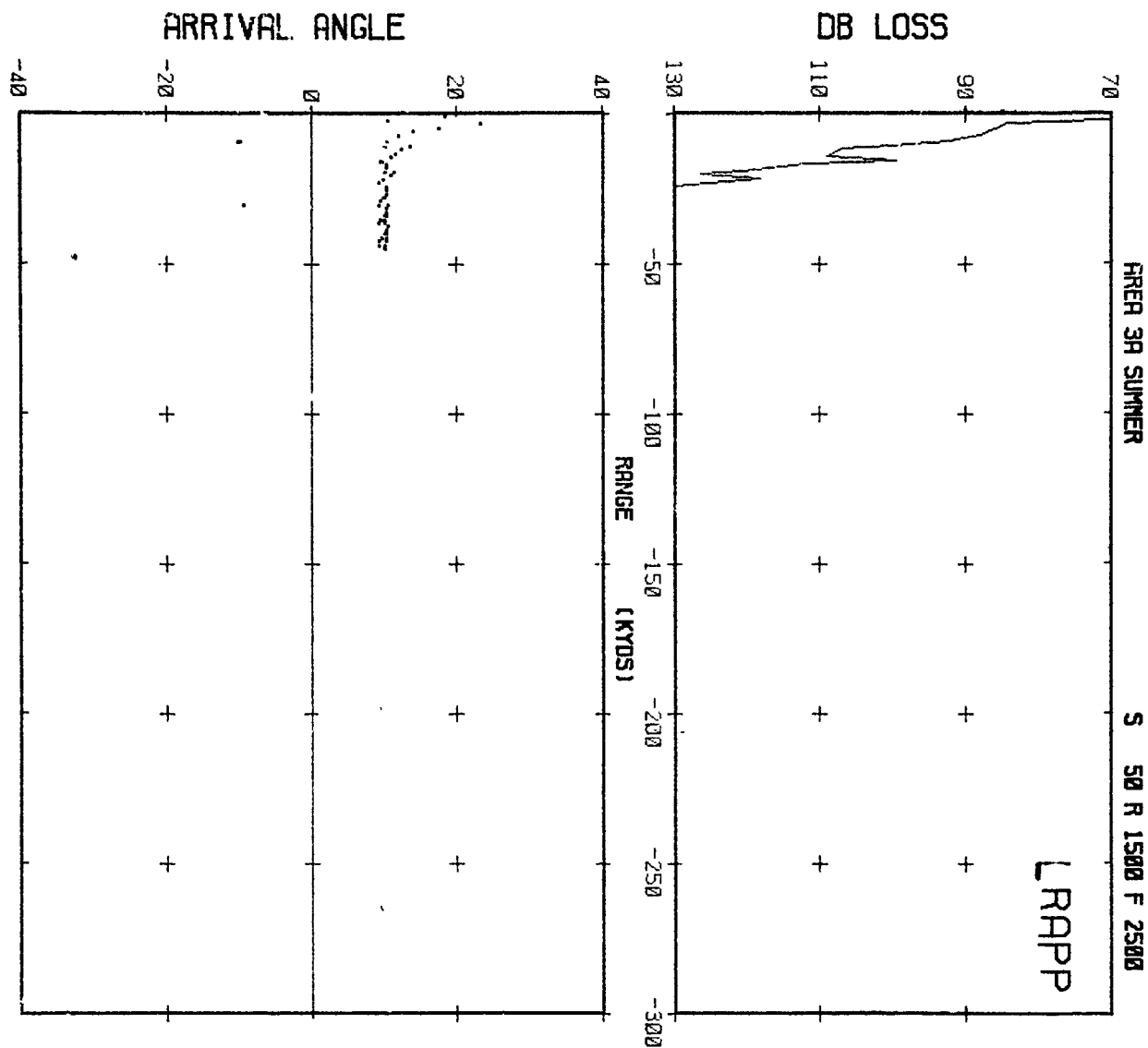


DEPTH IN METERS



NOISE (DB)



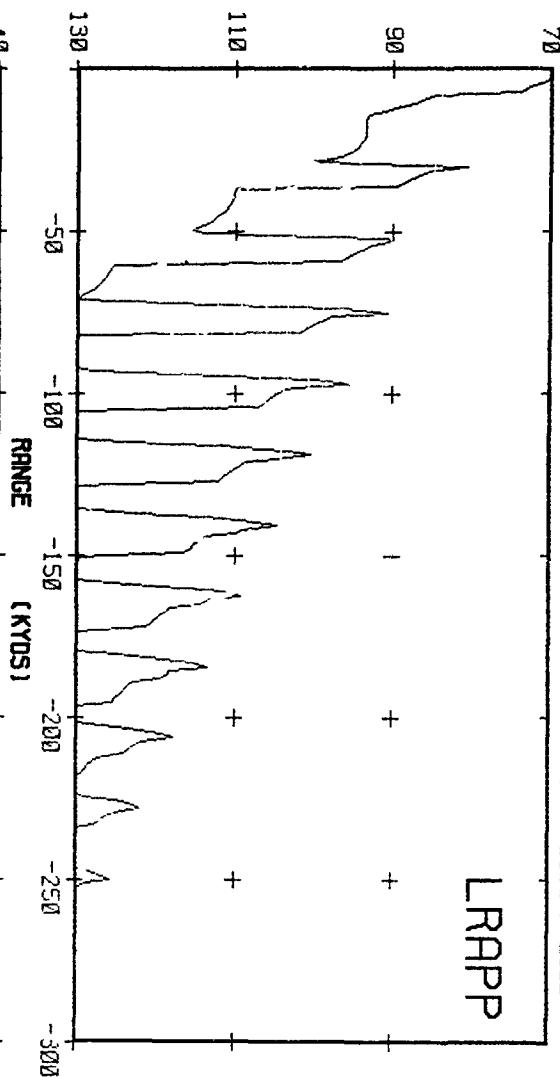


ARRER 3R SUMMER

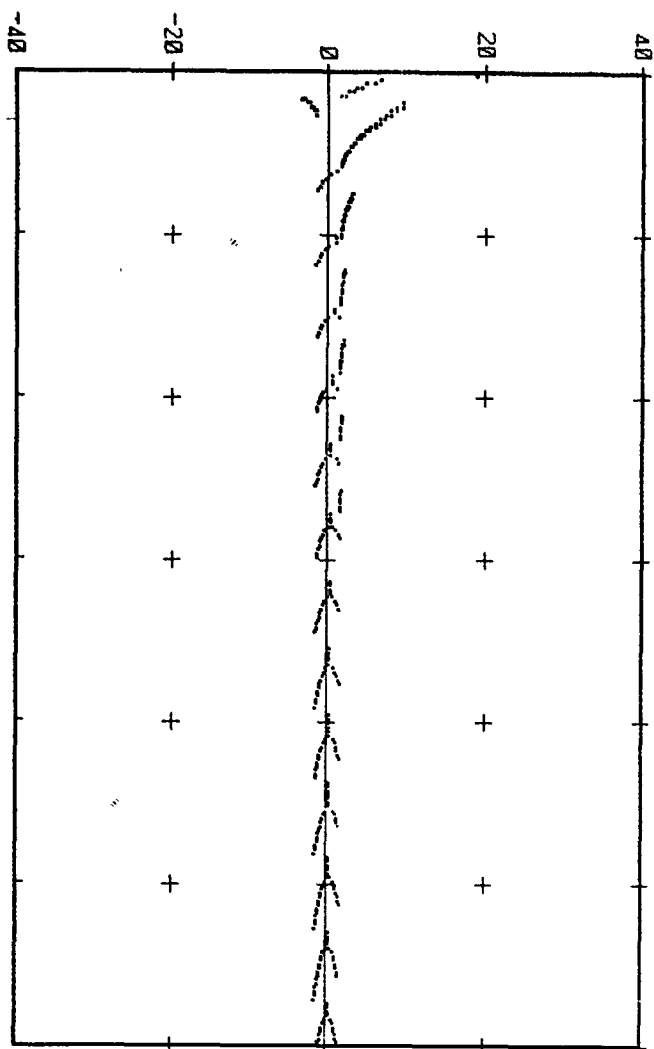
S 233 R 1500 F 2500

1450 M/S 1500 1550

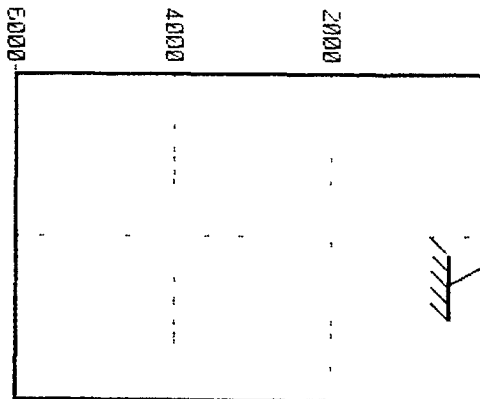
DB LOSS



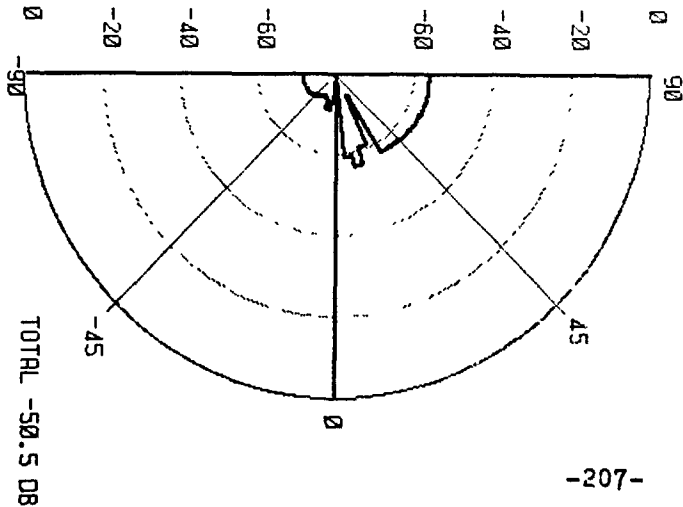
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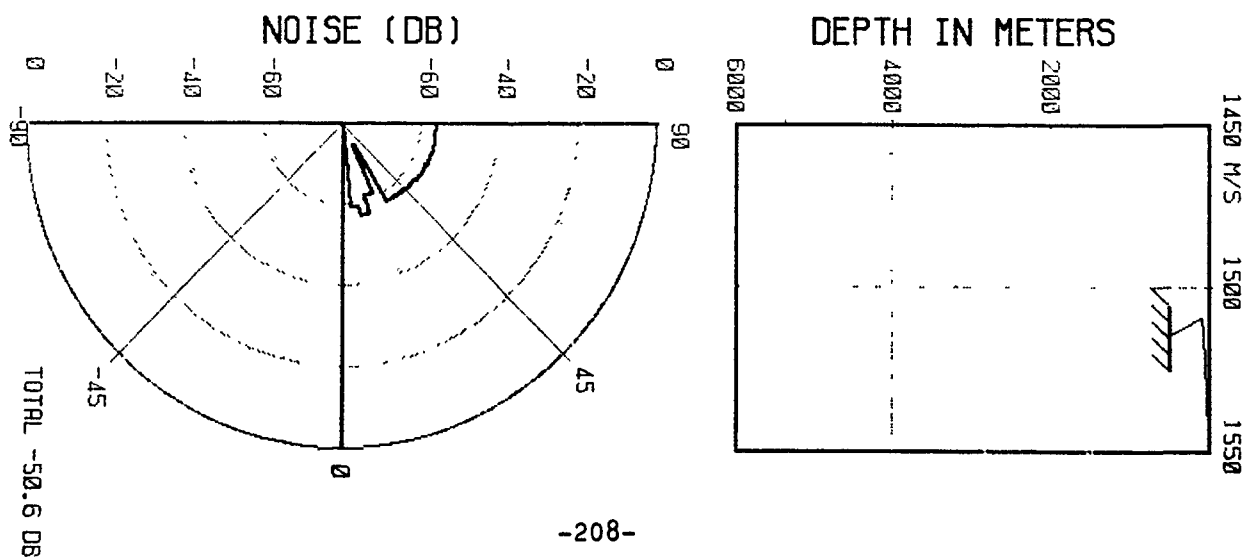
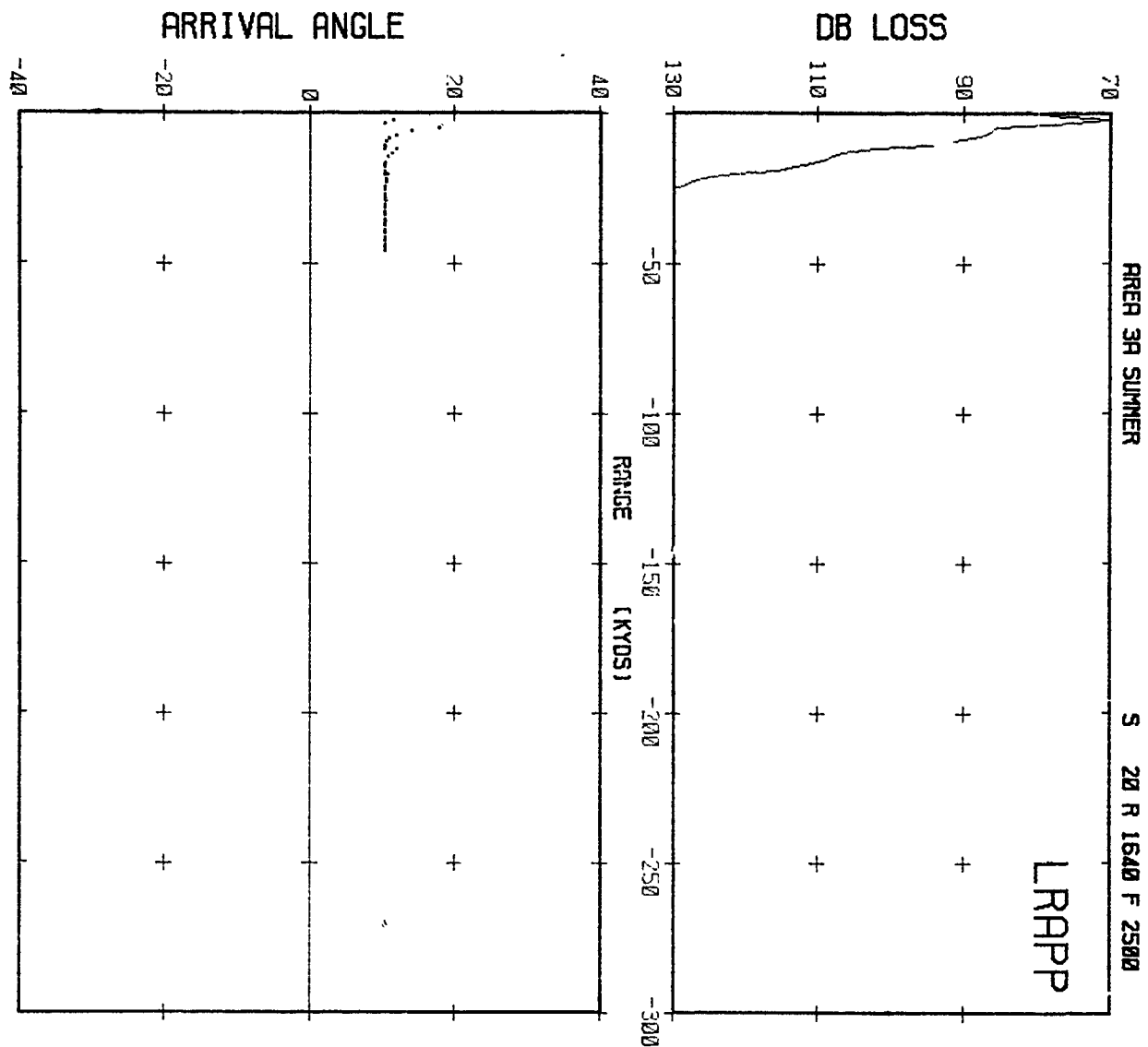


DEPTH IN METERS



NOISE (DB)



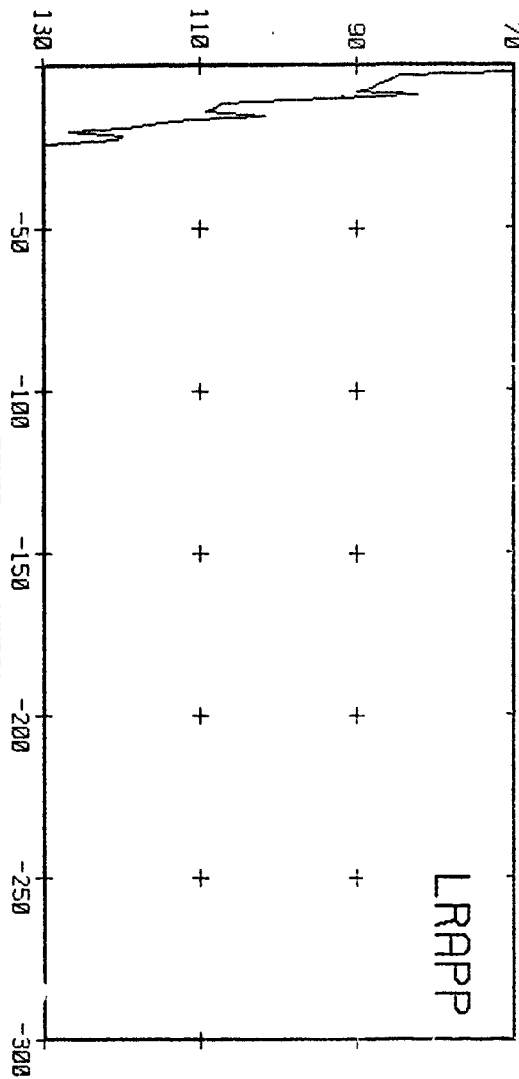


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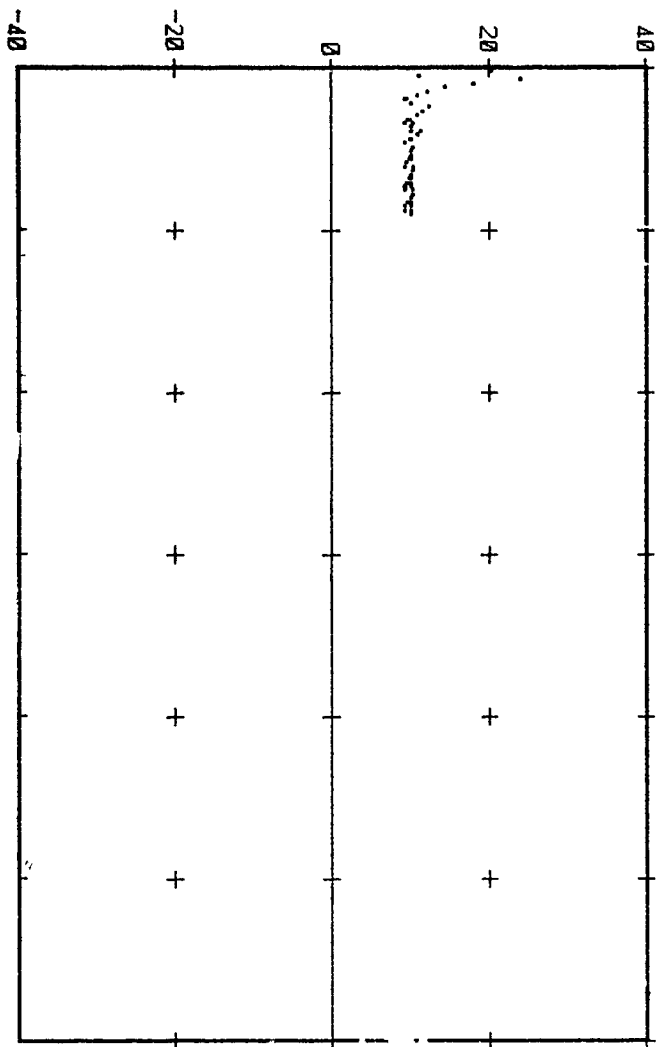
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1450 M/S 1500 1550

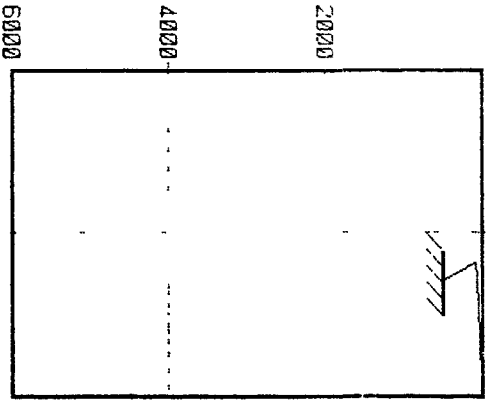
DB LOSS



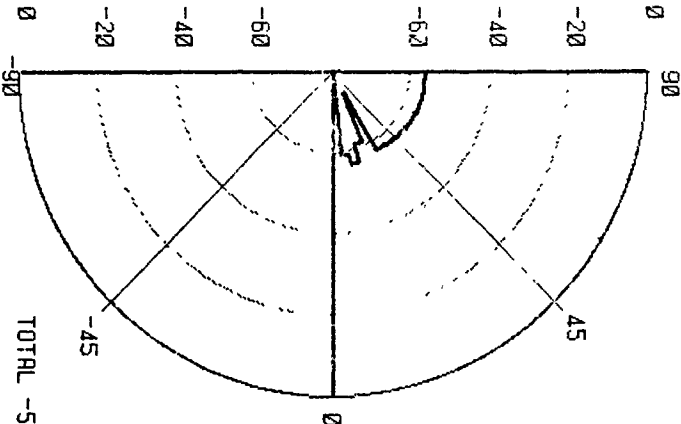
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)

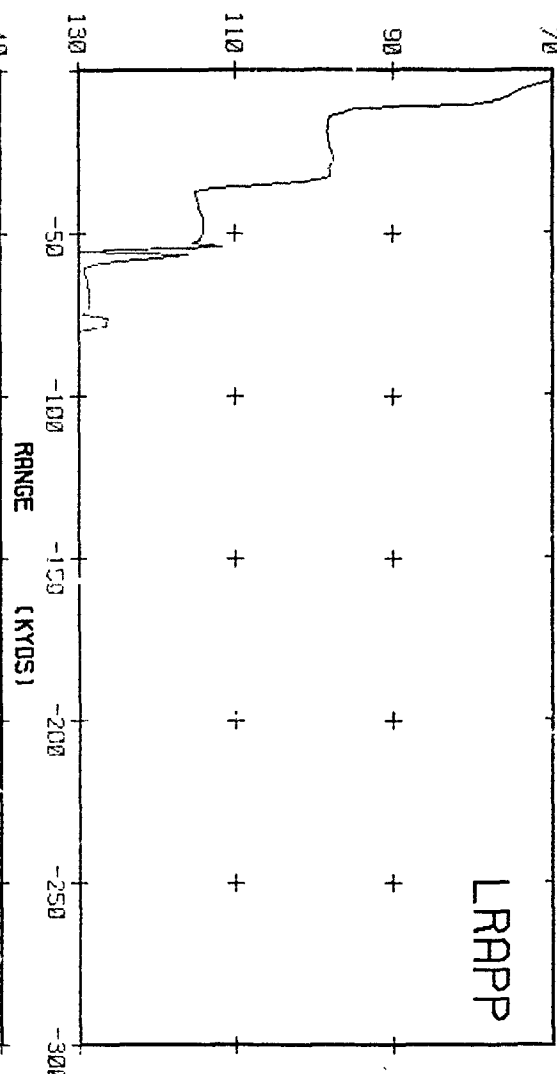


AREA 3A SUMMER

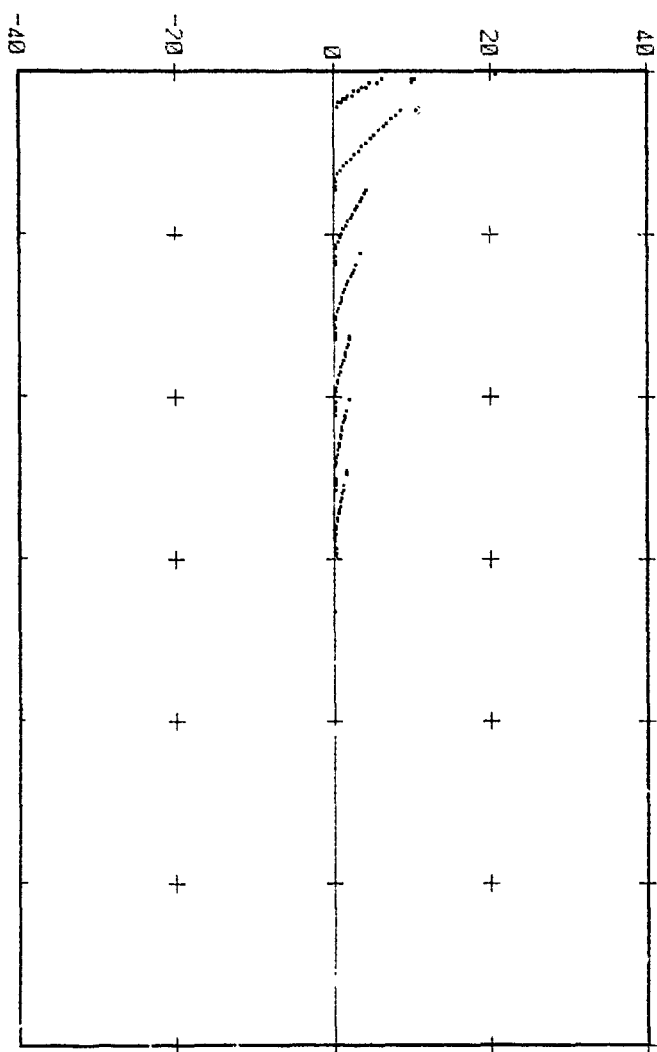
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LRAPP

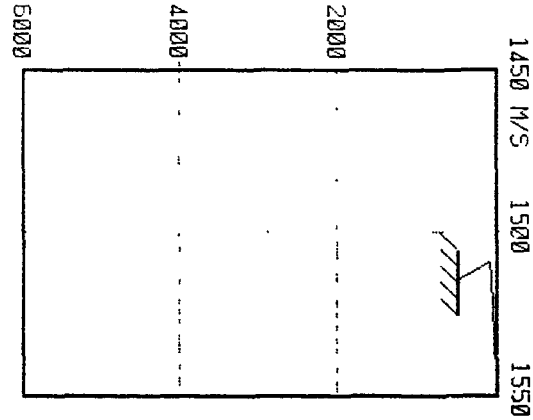
DB LOSS



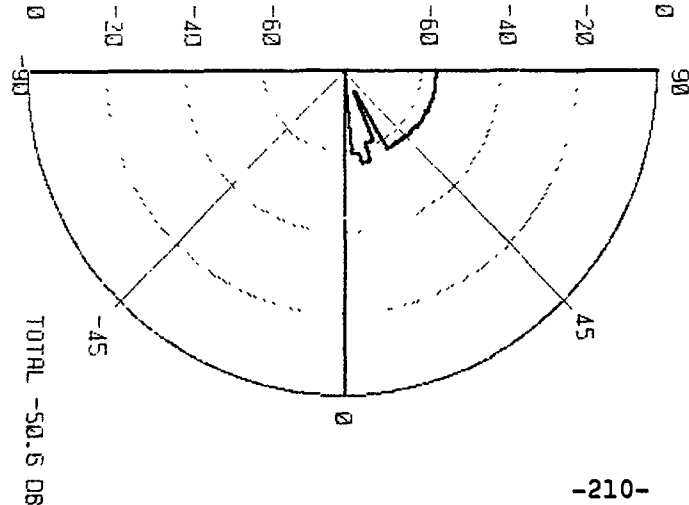
ARRIVAL ANGLE



DEPTH IN METERS



NOISE (DB)



SUPPLEMENTARY

INFORMATION

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Arlington, Virginia 22209
Telephone (703) 524-4870

TWENTY FIFTH
ANNIVERSARY

Bolt Beranek and Newman inc.

29 May 1973



AD-910342L
Defense Documentation Center
Cameron Station
Alexandria, Virginia 22314

Reference: Maury Center Report 011, Volume 7

Gentlemen:

Errors have been discovered in the ambient noise vertical directionality patterns on pages 106-110, 112, 113, 115, 116, 118, 119, 121, 122, 124 and 125 in Volume 7 of "Acoustic Environmental Scenarios and Predictions for ASW," Maury Center Report 011, October 1972. This volume was mailed to you recently.

Unfortunately, routine checks at The Fleet Numerical Weather Center, where the predictions were generated, and at Bolt Beranek and Newman Inc., where the reports were printed, failed to uncover these errors. Corrective measures are being taken and corrected pages to replace those noted above will be mailed to you as soon as they are available.

Sincerely,

Courtney B. Burroughs
Courtney B. Burroughs
Senior Scientist

CBB:cw



DEPARTMENT OF THE NAVY

OFFICE OF NAVAL RESEARCH
875 NORTH RANDOLPH STREET
SUITE 1425
ARLINGTON VA 22203-1995

IN REPLY REFER TO:

5510/1
Ser 321OA/011/06
31 Jan 06

MEMORANDUM FOR DISTRIBUTION LIST

Subj: DECLASSIFICATION OF LONG RANGE ACOUSTIC PROPAGATION PROJECT (LRAPP) DOCUMENTS

Ref: (a) SECNAVINST 5510.36

Encl: (1) List of DECLASSIFIED LRAPP Documents

1. In accordance with reference (a), a declassification review has been conducted on a number of classified LRAPP documents.
2. The LRAPP documents listed in enclosure (1) have been downgraded to UNCLASSIFIED and have been approved for public release. These documents should be remarked as follows:

Classification changed to UNCLASSIFIED by authority of the Chief of Naval Operations (N772) letter N772A/6U875630, 20 January 2006.

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3. Questions may be directed to the undersigned on (703) 696-4619, DSN 426-4619.

A handwritten signature in black ink, appearing to read "B. F. Link", is positioned above the typed name.

BRIAN LINK
By direction

Subj: DECLASSIFICATION OF LONG RANGE ACOUSTIC PROPAGATION PROJECT
(LRAPP) DOCUMENTS

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Declassified LRAPP Documents

Report Number	Personal Author	Title	Publication Source (Originator)	Pub. Date	Current Availability	Class.
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME VII. AREA 3A SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0910342	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME VIII. AREA 3B WINTER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0910343	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME IX. AREA 3B SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0910344	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME V. AREA 2 SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0911224	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME XI. AREA 4A SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0912560	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME X. AREA 4A WINTER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0916556	U
MC-011 VOL. 14	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME XIV. AREA 5 WINTER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0916557; ND	U
MC-011 VOL. 13	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME XIII. AREA 4B SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0916610; ND	U
MCR008	Goodman, R. R., et al.	THE NEAT 1 EXPERIMENT (U)	Maury Center for Ocean Science	721001	NS; ND	U
Unavailable	Cherry, W. R.	LRAPP BEAMFORMER	Scripps Institution of Oceanography Marine Physical Laboratory	721015	ADA081876	U
ONR ACR-186	Gregory, J. B.	PROJECT LRAPP TEST BED- TECHNOLOGY USED IN THE DEVELOPMENT OF A DEEP-OCEAN STABLE PLATFORM (U)	Office of Naval Research	721024	AD 52-3370 AD 52-3370 ; ND	U
MC-010	Unavailable	CHURCH GABBRO EXERCISE PLAN- LRAPP (U)	Maury Center for Ocean Science	721026	ND	U
WHOI-72-87	Daubin, S. C., et al.	THE ACODAC SYSTEM	Woods Hole Oceanographic Institution	721101	AD0756628; ND	U
NRLR7516	Fleming, H. S., et al.	PROJECT NEAT 1 ENVIRONMENTAL DATA REPORT (U) (USNS J.W. GIBBS)	Naval Research Laboratory	721129	NS; ND AD 52-3374	U